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Technical Specification

Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) conformance specification;
Part 4: Subscriber Interface Module (SIM)
application toolkit conformance specification
(3GPP TS 11.10-4 version 8.10.0 Release 1999)



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# Foreword

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The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- x the first digit:
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- z the third digit is incremented when editorial only changes have been incorporated in the document.

# 1 Scope

The present document describes the technical characteristics and methods of test for testing the SIM Application Toolkit implemented in Mobile Stations (MS) for the Pan European digital cellular communications system and Personal Communication Systems (PCS) operating in the 450 MHz, 480 MHz, 700 MHz, 750 MHz, 850 MHz, 900 MHz, 1 800 MHz and 1 900 MHz frequency band (GSM 400, GSM 700, GSM 750, GSM 850, GSM 900, DCS 1 800 and PCS 1 900) within the European digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [19] and ETS 300 406 [20].

The present document is valid for MS implemented according to GSM Phase2+ R96, or R97, or R98, or R99.

The present document covers the minimum characteristics considered necessary in order to provide sufficient performance for mobile equipment and to prevent interference to other services or to other users, and to the PLMNs.

It does not necessarily include all the characteristics which may be required by a user or subscriber, nor does it necessarily represent the optimum performance achievable.

The present document is part of the GSM-series of technical specifications. The present document neither replaces any of the other GSM technical specifications or GSM related ETSs or ENs, nor is it created to provide full understanding of (or parts of) the GSM 400, GSM 700, GSM 850, GSM 900, DCS1800 and PCS1900 systems . The present document lists the requirements, and provides the methods of test for testing the SIM Application Toolkit implemented in a MS for conformance to the GSM standard.

For a full description of the system, reference should be made to all the GSM technical specifications or GSM related ETSs or ENs. Clause 2 provides a complete list of the GSM technical specifications, GSM related ETSs, ENs, and ETRs, on which this conformance test specifications is based.

If there is a difference between this present conformance document, and any other GSM technical specification or GSM related ETS or EN, or 3GPP TS, then the other GSM technical specification or GSM related ETS or EN or 3GPP TS shall prevail.

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the relevant Release*.
  - For a GSM Phase 2+ Release 1999 MS, references to GSM documents are to version 8.x.y (for 01.-series to 12.-series) or (3.x.y for 21.-series to 35.-series), when available.
  - For a GSM Phase 2+ Release 1998 MS, references to GSM documents are to version 7.x.y, when available.
  - For a GSM Phase 2+ Release 1997 MS, references to GSM documents are to version 6.x.y, when available.
  - For a GSM Phase 2+ Release 1996 MS, references to GSM documents are to version 5.x.y,. when available.

NOTE: References to 3GPP Technical Specifications and Technical Reports throughout the present document shall be interpreted according to the Release shown in the formal reference in this clause, based upon the Release of the implementation under test.

EXAMPLE:	References for a R99 MS shall be interpreted as:
	[1] 3GPP TS 21.905 R99
	[2] 3GPP TS 22.001 R99
	etc.
[1]	3GPP TS 01.04 (R96 to R98): "Abbreviations and acronyms". 3GPP TR 21.905 (R99 onwards): "Vocabulary for 3GPP Specifications".
[2]	3GPP TS 02.01 (R96 to R98): "Principles of telecommunication services supported by a GSM Public Land Mobile Network (PLMN)". 3GPP TS 22.001 (R99 onwards): "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".
[3]	3GPP TS 02.03 (R96 to R98): "Teleservices supported by a GSM Public Land Mobile Network (PLMN)". 3GPP TS 22.003 (R99 onwards): "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".
[4]	3GPP TS 02.04 (R96 to R98): "General on supplementary services". 3GPP TS 22.004 (R99 onwards): "General on supplementary services".
[5]	3GPP TS 02.06 (R96 to R98): "Types of Mobile Stations (MS)".
[6]	3GPP TS 02.07 (R96 to R98): "Mobile Station (MS) features".
[7]	3GPP TS 03.38 (R96 to R98): "Alphabets and language-specific information". 3GPP TS 23.038 (R99 onwards): "Alphabets and language-specific information".
[8]	3GPP TS 03.40 (R96 to R98): "Technical realization of the Short Message Service (SMS); Point-to-Point (PP)". 3GPP TS 23.040 (R99 onwards): "Technical realization of the Short Message Service (SMS)".
[9]	3GPP TS 03.41 (R96 to R98): "Technical realization of Cell Broadcast Service (CBS)". 3GPP TS 23.041 (R99 onwards): "Technical realization of Cell Broadcast Service (CBS)".
[10]	3GPP TS 04.08 (R96 to R99): "Mobile radio interface; Layer 3 specification" (see note 1). 3GPP TS 24.008 (R99 onwards): "Mobile radio interface layer 3 specification; Core network protocols; Stage 3" (see note 1).
[11]	3GPP TS 04.11 (R96 to R98): "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".  3GPP TS 24.011 (R99 onwards): "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".
[12]	3GPP TS 51.010-1 (Rel-5): "Mobile Station (MS) conformance specification; Part 1: Conformance specification".
[13]	3GPP TS 11.11 (R96 to R99): "Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
[14]	3GPP TS 11.12 (R96): "Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
[15]	3GPP TS 11.14 (R96 to R99): "Specification of the SIM application toolkit for the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
[16]	Void.
[17a]	ISO/IEC 10646-1: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane".
[17b]	ISO/IEC 10646-2: "Information technology - Universal Multiple Octet Coded Character Set (UCS) - Part 2: Supplementary Planes".

[18]	3GPP TS 27.007 (R99 onwards): "AT command set for 3G User Equipment (UE)".
1101	JOH 15 27.007 (R77 Oliwards). At command set for 30 Osci Equipment (OE).

[19] ISO/IEC 9646-7 (1995): "Information technology - Open Systems Interconnection - Conformance

testing methodology and framework - Part 7: Implementation Conformance Statements".

[20] ETSI ETS 300 406 (1995): "Methods for Testing and Specification (MTS); Protocol and profile

conformance testing specifications; Standardization methodology".

# 3 Definitions and abbreviations

# 3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in 3GPP TS 51.010-1 [12] clause 3.1 shall apply, unless otherwise specified in the present clause.

# 3.2 Applicability

# 3.2.1 Applicability of the present document

The present specification applies to a terminal equipment that supports the SIM Application Toolkit optional feature.

# 3.2.2 Applicability of the individual tests

Table B.1 lists the optional features for which the supplier of the implementation states the support.

# 3.2.3 Applicability to terminal equipment

The applicability to terminal equipment specified in 3GPP TS 51.010-1 [12] clause 3.2.3 shall apply, unless otherwise specified in the present clause.

See table A.1.

### 3.2.4 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 51.010-1 [12], clause 3.3, apply.

### 3.2.4.1 Format of the table of optional features

### Option

The optional feature supported or not by the implementation.

#### Support Answer notation

The support columns shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [19], are used for the support column in the tables below.

Y or y supported by the implementation

N or n not supported by the implementation

N/A, n/a or - no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional

status)

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

### 3.2.4.2 Format of the applicability table

The applicability of every test in table B.1 is formally expressed by the use of Boolean expression defined in the following clause.

The columns in table B.1 have the following meaning:

- In the "Item" column a local entry number for the requirement in the table is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Release" column gives the Release applicable and onwards, for the item in the "Description" column
- The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in the present document and required to validate the implementation of the corresponding item in the "Description" column.
- For a given Release, the corresponding "Rel 9x ME" column lists the tests required for a Mobile Station to be declared compliant to this Release.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.
- The "Terminal Profile" column gives a reference to the corresponding bit that needs to be present in the Terminal Profile.

### 3.2.4.3 Status and notations

The "Release 9x ME" columns shows the status of the entries as follows:

The following notations, defined in ISO/IEC 9646-7 [19], are used for the status column:

M	mandatory - the capability is required to be supported.
O	optional - the capability may be supported or not.
N/A	not applicable - in the given context, it is impossible to use the capability.
X	prohibited (excluded) - there is a requirement not to use this capability in the given context.
O.i	qualified optional - for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table.

Ci conditional - the requirement on the capability ("M", "O", "X" or "N/A") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities.

#### References to items

For each possible item answer (answer in the support column) there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE: A.1/4 is the reference to the answer of item 4 in table A.1.

# 3.3 Table of optional features

Support of SIM Application Toolkit is optional for Mobile Equipment. However, if an ME states conformance with a specific GSM release, it is mandatory for the ME to support all functions of that release, as stated in table A.1.

The support of letter classes, which specify mainly ME hardware dependent features, is optional for the ME and may supplement the SIM Application Toolkit functionality described in the present document. If an ME states conformance to a letter class, it is mandatory to support all functions within the respective letter class.

The supplier of the implementation shall state the support of possible options in table A.1.

**Table A.1: Options** 

Item	Option	Status	Support	Mnemonic
1	Capability Configuration parameter	0		O_Cap_Conf
2	Sustained text	0		O_sust_text
3	UCS2 coding scheme for Entry	0		O_Ucs2_Entry
4	Extended Text String	0		O_Ext_Str
5	Help information	0		O_Help
6	Icons	0		O_lcons
7	Class A: Dual Slot	0		O_Dual_Slot
8	Detachable reader	0		O_Detach_Rdr
9	Class B: RUN AT	0		O_Run_At
10	Class C: LAUNCH BROWSER	0		O_LB
11	Class D: Soft keys	0		O_Soft_key
12	Class E: B.I.P related to CSD	0		O_BIP_CSD
13	Screen sizing parameters	0		O_Scr_Siz
14	Screen Resizing	0		O_Scr_Resiz
15	UCS2 coding scheme for Display	0		O_Ucs2_Disp
16	Mobile supporting GPRS	0		O_GPRS
17	Mobile supporting UDP	0		O_UDP
18	Mobile supporting TCP	0		O_TCP
19	Redial in Set Up Call	0		O_Redial
20	Mobile decision to respond with	0		O_D_NoResp
	"No response from user" in finite			
	time			
21	Class E: B.I.P related to GPRS	0		O_BIP_GPRS
22	Mobile supporting Called Party	0		O_CP_Subaddr
	Subaddress			

# 3.4 Applicability table

Table B.1: Applicability of tests

tem	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
1	PROFILE DOWNLOAD 27.22.1	R96	1	M	M	М	М	E.1/1	
2	Contents of the TERMINAL PROFILE command 27.22.2	R96		М	М	М	M	E.1/1	
3	Servicing of Proactive SIM Commands 27.22.3	R96		М	М	M	M		
4	DISPLAY TEXT 27.22.4.1								
	Unpacked	R96	1.1	М	М	М	М	E.1/17	
	Screen busy	R96	1.2	М	М	M	M	E.1/17	
	high priority	R96	1.3	М	М	M	M	E.1/17	
	Packed	R96	1.4	М	М	M	M	E.1/17	
	clear after delay	R96	1.5	М	М	M	M	E.1/17	
	clear after user confirmation	R96	1.1	М	М	M	M	E.1/17	
	long text up to 160 bytes	R96	1.6	М	М	M	M	E.1/17	
	Backwards move in SIM session	R96	1.7	М	М	M	M	E.1/17	
	Session terminated by user	R96	1.8	М	М	M	M	E.1/17	
	Command not understood by ME	R96	1.9	М	М	M	M	E.1/17	
	no response from user	R96	2.1	М	М	M	M	E.1/17	
	Extension Text	R98	3.1			C106	C106	E.1/17 AND E.1/16	
	sustained text	R98	4.1, 4.2, 4.3, 4.4			C104	C104	E.1/17 AND E.1/65	
	Icons	R98	5.1, 5.2, 5.3			C108	C108	E.1/17	
	UCS2 display	R97	6.1		C118	C118	C118	E.1/17 AND E.1/15	

	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	GET INKEY 27.22.4.2								
	prompt unpacked	R96	1.1	М	М	М	М	E.1/18	
	prompt packed	R96	1.2	М	М	М	М	E.1/18	
	digits only	R96	1.1	М	M	M	М	E.1/18	
	Backwards move in SIM session	R96	1.3	М	М	М	М	E.1/18	
	Session terminated by user	R96	1.4	М	M	M	M	E.1/18	
	SMS alphabet	R96	1.5	М	M	M	М	E.1/18	
	Long text up to 160 bytes	R96	1.6	М	M	M	М	E.1/18	
	no response from user	R96	2.1	М	М	M	М	E.1/18	
	UCS2 display	R97	3.1		C118	C118	C118	E.1/18	
								AND	
								E.1/15	
Ī	UCS2 display, Long text up to 70 chars	R97	3.2		C118	C118	C118	E.1/18	
								AND	
								E.1/15	
	UCS2 format of entry	R97	4.1		C105	C105	C105	E.1/18	
								AND	
								E.1/14	
Ī	"Yes/No" response	R98	5.1			M	М	E.1/18	
								AND	
								E.1/60	
Ī	Icons	R98	6.1, 6.2,			C108	C108	E.1/18	
			6.3, 6.4						
Ī	Help information	R97	7.1		C107	C107	C107	E.1/18	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
6	GET INPUT 27.22.4.3		, ,						
	input unpacked	R96	1.1	М	M	М	М	E.1/19	
	input packed	R96	1.2	М	M	М	М	E.1/19	
	digits only	R96	1.1	М	M	М	М	E.1/19	
	SMS alphabet	R96	1.3	М	M	М	М	E.1/19	
	hidden input	R96	1.4	M	M	М	М	E.1/19	
	min / max acceptable length	R96	1.5, 1.9	М	М	М	М	E.1/19	
	Backwards move in SIM session	R96	1.6	М	M	М	М	E.1/19	
	Session terminated by user	R96	1.7	М	М	М	М	E.1/19	
	Prompt text up to 160 bytes	R96	1.8	М	М	М	М	E.1/19	
	SMS default alphabet, ME to echo text, packing not required	R96	1.9	М	М	М	М	E.1/19	
	Null length for the text string	R96	1.10	М	М	М	М	E.1/19	
	no response from user	R96	2.1	М	М	М	М	E.1/19	
	UCS2 display	R97	3.1, 3.2		C118	C118	C118	E.1/19	
								AND	
								E.1/15	
	UCS2 entry	R97	4.1, 4.2		C105	C105	C105	E.1/19	
			,					AND	
								E.1/14	
	default text for the input	R97	5.1, 5.2		М	М	М	E.1/19	
	icons	R98	6.1, 6.2, 6.3, 6.4			C108	C108	E.1/19	
	help information	R97	7.1		C107	C107	C107	E.1/19	
7	MORE TIME 27.22.4.4	R96	1.1	М	M	М	М	E.1/20	
8	PLAY TONE 27.22.4.5								
	play all tones	R96	1.1	М	M	М	М	E.1/21	
	display alpha	R96	1.1	М	М	М	М	E.1/21	
	user termination	R96	1.1	М	М	М	М	E.1/21	
	superimpose	R96	1.1	М	М	М	М	E.1/21	
	UCS2 display	R97	TBD					E.1/21	
								AND	
								E.1/15	
	icons	R98	TBD					E.1/21	
9	POLL INTERVAL 27.22.4.6								
	duration	R96	1.1	М	М	М	М	E.1/22	
10	REFRESH 27.22.4.7								
	SIM initialization, enabling FDN mode	R96	1.1	М	М	М	М	E.1/24	
	file change notification of FDN file	R96	1.2	М	М	М	М	E.1/24	
	SIM initialization and file change notification of PLMN	R96	1.3	М	M	М	М	E.1/24	
	SIM initialization and full file change notification, enabling FDN mode	R96	1.4	M	M	M	M	E.1/24	
	SIM reset	R96	1.5	М	M	М	M	E.1/24	1
1	SIM Initialization after SMS-PP data download	R96	1.6	M	M	M	M	E.1/24 E.1/24	
	Silvi iriitialization aiter Sivis-PP data download	RAD	۵.۱	IVI	IVI	IVI	IVI	□.1/24	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	IMSI Changing procedure	R98	2.1			М	М	E.1/24	
11	SET UP MENU 27.22.4.8							-	
	Set up, menu selection, replace and remove menu	R96	1.1	М	М	М	М	E.1/30 AND E.1/4	
	Large menu	R96	1.2	М	М	М	М	E.1/30 AND E.1/4	
	help information	R97	2.1		C107	C107	C107	E.1/30 AND E.1/4	
	next action indicator	R97	3.1		М	М	М	E.1/30	
	icons	R98	4.1, 4.2			C108	C108	E.1/30	
	soft key access	R99	5.1				C112	E.1/30 AND E.1/74	
12	SELECT ITEM 27.22.4.9								
	Mandatory features	R96	1.1	М	М	М	М	E.1/25	
	Large menu	R96	1.2, 1.3, 1.5,1.6	М	М	М	М	E.1/25	
	Backwards move	R96	1.4	М	М	М	М	E.1/25	
	user termination	R96	1.5	М	М	M	М	E.1/25	
	no response from user	R96	8.1	C120	C120	C120	C120	E.1/25	
	next action indicator	R97	2.1		М	М	М	E.1/25	
	default selected item	R97	3.1		М	M	М	E.1/25	
	help information	R97	4.1		C107	C107	C107		
	icons	R98	5.1, 5.2			C108	C108	E.1/25	
	Presentation style	R98	6.1, 6.2			M	M	E.1/25	
	Soft keys	R99	7.1				C112	E.1/25 AND E.1/73	
13	SEND SMS 27.22.4.10								
	Packing not required	R96	1.1, 1.3 1.5	М	М	М	М	E.1/26	
	Packing required	R96	1.2, 1.4	M	М	М	М	E.1/26	
	8 bit data	R96	1.1, 1.2	M	М	M	М	E.1/26	
	SMS default alphabet	R96	1.3, 1.4, 1.5	М	М	М	M	E.1/26	
	160 bytes length	R96	1.4, 1.5	М	M	М	М	E.1/26	
	Alpha identifier	R96	1.6, 1.7, 1.8	М	М	М	М	E.1/26	
	UCS2 SMS	R97	2.1		C118	C118	C118	E.1/26 AND E.1/15	
	icons	R98	3.1, 3.2			C108	C108	E.1/26	
14	SEND SS 27.22.4.11								

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	call forward unconditional, all bearers, successful	R96	1.1	М	М	М	М	E.1/27	
	call forward unconditional, all bearers, Return Error	R96	1.2	М	М	М	М	E.1/27	
	call forward unconditional, all bearers, Reject	R96	1.3	М	М	М	М	E.1/27	
	call forward unconditional, all bearers, successful, SS request size limit	R96	1.4	М	М	М	М	E.1/27	
	interrogate CLIR status, successful, alpha identifier limits	R96	1.5	М	M	M	М	E.1/27	
	call forward unconditional, all bearers, successful, null data alpha identifier	R96	1.6	М	М	М	М	E.1/27	
	call forward unconditional, all bearers, successful, icon support	R98	2.1, 2.2, 2.3, 2.4			C108	C108	E.1/27	
	UCS2 display	R97	3.1		C118	C118	C118	E.1/27 AND E.1/15	
15	SEND USSD 27.22.4.12								
	7-bit data, successful	R96	1.1	М	M	М	М	E.1/28	
	8-bit data, successful	R96	1.2	М	M	М	М	E.1/28	
	UCS2 data, successful	R96	1.3	М	M	М	М	E.1/28	
	7-bit data, unsuccessful	R96	1.4	М	M	М	М	E.1/28	
	7-bit data, unsuccessful	R96	1.5	М	M	М	М	E.1/28	
	256 octets, 7-bit data, successful, long alpha identifier	R96	1.6	М	M	М	М	E.1/28	
	7-bit data, successful, no alpha identifier	R96	1.7	М	M	М	М	E.1/28	
	7-bit data, successful, null length alpha identifier	R96	1.8	М	M	М	М	E.1/28	
	icons	R98	2.1, 2.2, 2.3, 2.4			C108	C108	E.1/28	
	UCS2	R97	3.1		C118	C118	C118	E.1/28 AND E.1/15	
16	SET UP CALL 27.22.4.13								
	Call confirmed by the user and connected	R96	1.1	М	М	М	М	E.1/29	
	call rejected by the user	R96	1.2	М	М	М	М	E.1/29	
	redial	R96	1.3	C119	C119	C119	C119	E.1/29	
	putting all other calls on hold, ME busy	R96	1.4	М	М	М	М	E.1/29	
	disconnecting all other calls, ME busy	R96	1.5	М	М	М	М	E.1/29	
	only if not currently busy on another call, ME busy	R96	1.6	М	М	М	М	E.1/29	
	putting all other calls on hold, call hold is not allowed	R96	1.7	М	М	М	М	E.1/29	
	Capability configuration	R96	1.8	C101	C101	C101	C101	E.1/29	
	long dialling number string	R96	1.9	М	M	М	М	E.1/29	
	long first alpha identifier	R96	1.10	М	М	М	М	E.1/29	
	Called party subaddress	R96	1.11	C124	C124	C124	C124	E.1/29	
	maximum duration for the redial mechanism	R96	1.12	C119	C119	C119	C119	E.1/29	
	second alpha identifier	R98	2.1	-	-	М	М	E.1/29 AND	
								E.1/63	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	UCS2 Display	R97	TBD					E.1/29 AND E.1/15	
	icons	R98	3.1,3.2, 3.3, 3.4			C108	C108	E.1/29	
17	POLLING OFF 27.22.4.14	R96	1.1	М	M	М	М	E.1/23	
18	PROVIDE LOCAL INFO 27.22.4.15								
	location information	R96	1.1	М	M	М	М	E.1/31	
	IMEI	R96	1.2	М	M	М	М	E.1/31	
	network measurement results and BCCH channel list	R98	1.3			M	M	E.1/32 AND E.1/67	
	Date, time and time zone	R98	1.4			М	М	E.1/59	
	language setting	R99	1.5				М	E.1/68	
	Timing advance	R99	1.6				М	E.1/69	
19	SET UP EVENT LIST 27.22.4.16								
	Set up call connected event	R97	1.1		M	M	М	E.1/33 AND E.1/35	
	Replace by new event list	R97	1.2		М	M	М	E.1/33 AND E.1/35 AND E.1/36	
	Remove event	R97	1.3		М	М	М	E.1/33 AND E.1/35	
	Remove Event on ME Power Cycle	R97	1.4		М	М	М	E.1/33 AND E.1/35	
20	PERFORM CARD APDU 27.22.4.17								
	Additional card inserted, Select MF and Get Response	R98	1.1			C109	C109	E.1/51	
	Additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN	R98	1.2			C109	C109	E.1/51	
	Additional card inserted, card powered off	R98	1.3			C109	C109	E.1/51	
	No card inserted, card powered off	R98	1.4			C109	C109	E.1/51	
	Invalid card reader identifier	R98	1.5			C109	C109	E.1/51	
	Detachable reader	R98	2.1			C116	C116	E.1/51	
21	POWER OFF CARD 27.22.4.18								
	Additional card inserted	R98	1.1			C109	C109	E.1/50	
	No card inserted	R98	1.2			C109	C109	E.1/50	
	Detachable reader	R98	2.1			C116	C116	E.1/50	
22	POWER ON CARD 27.22.4.19								1

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	Additional card inserted	R98	1.1			C109	C109	E.1/49	
	No ATR	R98	1.2			C109	C109	E.1/49	
	No card inserted	R98	1.3			C109	C109	E.1/49	
	Detachable reader	R98	2.1			C116	C116	E.1/49	
23	GET READER STATUS 27.22.4.20								
	Additional card inserted, card powered	R98	1.1			C109	C109	E.1/52	
	Additional card inserted, card not powered	R98	1.2			C109	C109	E.1/52	
	Additional card inserted, card not present	R98	1.3			C109	C109	E.1/52	
	Detachable reader	R98	2.1			C116	C116	E.1/52	
24	TIMER MANAGEMENT 27.22.4.21.1						9.10		
	Start timer 1 several times, get the current value of the timer and deactivate the timer successfully	R98	1.1			М	М	E.1/57 AND E.1/58	
	Start timer 2 several times, get the current value of the timer and deactivate the timer successfully	R98	1.2			М	М	E.1/57 AND E.1/58	
	Start timer 8 several times, get the current value of the timer and deactivate the timer successfully	R98	1.3			М	М	E.1/57 AND E.1/58	
	Try to get the current value of a timer which is not started: action in contradiction with the current timer state	R98	1.4			М	М	E.1/57 AND E.1/58	
	Try to deactivate a timer which is not started: action in contradiction with the current timer state	R98	1.5			М	М	E.1/57 AND E.1/58	
	Start 8 timers successfully	R98	1.6			М	М	E.1/57 AND E.1/58	
25	ENVELOPE TIMER EXPIRATION 27.22.4.21.2							211,700	
	Pending proactive SIM command	R98	2.1			М	М	E.1/6 AND E.1/57	
	SIM application toolkit busy	R98	2.2			М	М	E.1/6 AND E.1/57 AND E.1/20	
26	SET UP IDLE MODE TEXT 27.22.4.22								
	Display idle mode text	R98	1.1			М	М	E.1/61 AND E.1/33 AND E.1/39	
	Replace idle mode text	R98	1.2			М	М	E.1/61 AND	

)	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
								E.1/33 AND E.1/39	
	Remove idle mode test	R98	1.3			М	M	E.1/61 AND E.1/33 AND E.1/39	
	Competing information on ME display	R98	1.4			М	М	E.1/61 AND E.1/33 AND E.1/39	
	ME powered cycled	R98	1.5			М	М	E.1/61 AND E.1/33 AND E.1/39	
	Refresh with SIM initialization	R98	1.6			M	М	E.1/61 AND E.124 AND E.1/33 AND E.1/39	
	Large text string	R98	1.7			М	M	E.1/61 AND E.1/33 AND E.1/39	
	Followed by a Display Text	R98	1.8			M	M	E.1/61 AND E.1/33 AND E.1/39 AND E.1/17	
	Followed by a Play Tone	R98	1.9			М	M	E.1/61 AND E.1/33 AND E.1/39 AND E.1/21	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	icons	R98	2.1, 2.2, 2.3, 2.4			C108	C108	E.1/61 AND E.1/39	
	UCS2 display	R98	3.1			C118	C118	E.1/61 AND E.1/15 AND E.1/39	
27	RUN AT COMMAND 27.22.4.23								
	No alpha Identifier	R98	1.1			C110	C110	E.1/62	
	null data alpha identifier presented	R98	1.2			C110	C110	E.1/62	
	alpha identifier presented	R98	1.3			C110	C110	E.1/62	
	icons	R98	2.1, 2.2, 2.3, 2.4, 2.5			C114	C114	E.1/62	
28	SEND DTMF 27.22.4.24								
	Normal	R98	1.1			М	М	E.1/66	
	alpha identifier	R98	1.2, 1.3			М	М	E.1/66	
	Mobile is not in a speech call	R98	1.4			M	М	E.1/66	
	Icons	R98	2.1, 2.2, 2.3			C108	C108	E.1/66	
	UCS2 display	R98	3.1			C118	C118	E.1/66 AND E.1/15	
29	LANGUAGE NOTIFICATION 27.22.4.25								
	Specific language notification	R99	1.1				М	E.1/70	
	Non specific language notification	R99	1.2				М	E.1/70	
30	LAUNCH BROWSER 27.22.4.26								
	No session already launched: Connect to the default URL	R99	1.1				C111	E.1/71	
	connect to the specified URL, alpha identifier length=0	R99	1.2				C111	E.1/71	
	Browser identity, no alpha identifier	R99	1.3				C111	E.1/71	
	one bearer specified and gateway/proxy identity	R99	1.4				C122	E.1/71	
	several bearers specified, gateway/proxy id specified	R99	1.5				C122	E.1/71	
	Interaction with current session	R99	2.1, 2.2, 2.3				C111	E.1/71	
	UCS2 display	R99	3.1				C117	E.1/71 AND E.1/15	
	icons	R99	4.1, 4.2				C115	E.1/71	
	licotic	1100	T. 1, T.Z	<u> </u>			0110	L.1// 1	l

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
31	OPEN CHANNEL 27.22.4.27		(-)						
	Immediate link establishment, CSD, 9600 bps	R99	1.1, 1.2, 1.3, 1.4, 1.5, 1.6				C113	E.1/89 AND E.1/97	
	immediate link establishment, CSD, 9600 bps, performed with modification	R99	1.7				C113	E.1/89 AND E.1/97	
	immediate link establishment, CSD, Network currently unable to process command	R99	1.8				C113	E.1/89 AND E.1/97	
	immediate link establishment, CSD, No channel available	R99	1.9				C113	E.1/89 AND E.1/97	
	CSD, ME busy on call	R99	1.10				C113	E.1/89 AND E.1/97 AND E.1/29	
	immediate link establishment, GPRS, no local address, no alpha identifier, no network access name	R99	2.1				C121	E.1/89 AND E.1/98	
	immediate link establishment GPRS, no alpha identifier, with network access name	R99	2.2				C121	E.1/89 AND E.1/98	
	immediate link establishment, GPRS, with alpha identifier	R99	2.3				C121	E.1/89 AND E.1/98	
	immediate link establishment, GPRS, with null alpha identifier	R99	2.4				C121	E.1/89 AND E.1/98	
	immediate link establishment, GPRS, command performed with modifications (buffer size)	R99	2.5				C121	E.1/89 AND E.1/98	
	Void	Void	2.6				Void	Void	
	immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command	R99	2.7				C121	E.1/89 AND E.1/98	
	GPRS, ME busy on call	R99	2.8				C121	E.1/89 AND E.1/98	
32	CLOSE CHANNEL 27.22.4.28								
	successful	R99	1.1				C113 AND C121	E.1/89 AND E.1/90	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	with an invalid channel identifier	R99	1.2				C113 AND C121	E.1/89 AND E.1/90	
	on an already closed channel	R99	1.3				C113 AND C121	E.1/90	
33	RECEIVE DATA 27.22.4.29								
	already opened channel	R99	1.1				C113 AND C121	E.1/89 AND E.1/91	
34	SEND DATA 27.22.4.30								
	immediate mode	R99	1.1				C113 AND C121	E.1/89 AND E.1/92	
	Store mode	R99	1.2				C113 AND C121	E.1/89 AND E.1/92	
	Store mode, Tx buffer fully used	R99	1.3				C113 AND C121	E.1/89 AND E.1/92	
	2 consecutive SEND DATA Store mode	R99	1.4				C113 AND C121	E.1/89 AND E.1/92	
	immediate mode with a bad channel identifier	R99	1.5				C113 AND C121	E.1/89 AND E.1/92	
	immediate mode, Proactive SIM session terminated by the user	R99	1.6				C113 AND C121	E.1/89 AND E.1/92	
35	GET CHANNEL STATUS 27.22.4.31								
	without any BIP channel opened	R99	1.1				C113 AND C121	E.1/93	
	with a BIP channel currently opened	R99	1.2				C113 AND C121	E.1/89 AND E.1/93	
	after a link dropped	R99	1.3				C113 AND C121	E.1/89 AND E.1/93	
36	DATA DOWNLOAD TO SIM 27.22.5								
37	SMS-PP DATA DOWNLOAD 27.22.5.1								
	[void]	Boo	1.1		<del> </del>		ļ	F 4/0	
	SIM responds with '91 XX'	R96	1.2	M	M	М	M	E.1/2	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	More time	R96	1.3	М	М	М	М	E.1/2	
	8 bit alphabet	R96	1.4	М	М	М	М	E.1/2	
	[void]		1.5						
	Data coding / message class	R96	1.6	М	М	М	М	E.1/2	
38	SMS-CB DATA DOWNLOAD 27.22.5.2								
	ME does not display message	R96	1.1	М	М	М	М	E.1/3	
	More time	R96	1.2	М	М	М	М	E.1/3 AND E.1/20	
	ME displays message	R96	1.3	М	М	М	М	E.1/3	
39	CALL CONTROL BY SIM 27.22.6				1			211,0	
	Procedure for MO calls (Cell identity in envelope call control)	R97	1.1 to 1.14		М	M	М	E.1/10 AND E.1/11 AND E.1/13 AND E.1/29	
	Procedure for SS (Cell identity in envelope call control)	R97	2.1, 2.2, 2.3, 2.4		M	M	M	E.1/10 AND E.1/11	
	Interaction with FDN (Cell identity in envelope call control)	R97	3.1, 3.2, 3.3, 3.5		М	М	М	E.1/10	
	Support of BDN service (Cell identity in envelope call control)	R97	4.1, 4.2, 4.3, 4.4		М	М	М	E.1/10	
40	EVENT DOWNLOAD 27.22.7								
	27.22.7.1: MT call event	R97	1.1		М	M	М	E.1/34 AND E.1/33	
	27.22.7.2.1: call connected event	R97	1.1		М	M	М	E.1/35 AND E.1/33	
	27.22.7.2.2: ME supporting SET UP CALL	R97	2.1		М	М	M	E.1/35 AND E.1/29 AND E.1/33	
	27.22.7.3: call disconnected event	R97	1.1		М	M	М	E.1/36 AND E.1/33	
	27.22.7.4: location status event	R97	1.1		М	M	М	E.1/37 AND E.1/33	
	27.22.7.5: user activity event	R97	1.1		М	М	М	E.1/38	

Item	Description	Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
								AND	
		507						E.1/33	
	27.22.7.6: idle screen available event	R97	1.1		М	М	М	E.1/39 AND	
								E.1/33	
	27.22.7.7.1: Card reader status normal	R98	1.1			C109	C109	E.1/40	
								AND	
								E.1/33	
	27.22.7.7.2: Detachable card reader	R98	2.1			C116	C116	E.1/40	
								AND	
	27.22.7.8: language selection event	R99	1.1				M	E.1/33 E.1/41	
	27.22.7.6. language selection event	Kaa	1.1				IVI	AND	
								E.1/33	
	27.22.7.9: Browser termination event	R99	1.1				C111	E.1/42	
								AND	
								E.1/33	
	27.22.7.10: Data available event	R99	1.1				C113	E.1/43	
							AND	AND	
							C121	E.1/89 AND	
								E.1/33	
	27.22.7.11: Channel status event	R99	1.1				C113	E.1/44	
			1				AND	AND	
							C121	E.1/89	
								AND	
44	MO CMC Control by CIM 27 22 0							E.1/33	
41	MO SMS Control by SIM 27.22.8 With proactive command, Allowed , no modification	R98	1.1			M	M	E1/12	
	With proactive command, Allowed , no modification	K90	1.1			IVI	IVI	AND	
								E.1/26	
	With user SMS, Allowed , no modification	R98	1.2			М	М	E1/12	
	With proactive command, Not allowed	R98	1.3			М	М	E1/12	
								AND	
		_						E.1/26	
	With user SMS, Not allowed	R98	1.4	ļ		M	М	E1/12	
	With proactive command, Allowed, with modifications	R98	1.5			M	М	E1/12 AND	
								E.1/26	
	With user SMS, Allowed, with modifications	R98	1.6	-	+	M	М	E1/12	
	With Proactive command, the SIM responds with '90 00',	R98	1.7	1		M	M	E1/12	
	Allowed, no modification		1			•••	""	AND	
			<u> </u>					E.1/26	
	Send Short Message attempt by user, the SIM responds	R98	1.8			М	М	E1/12	

Item	Description		Release	Test sequence (s)	Rel 96 ME	Rel 97 ME	Rel 98 ME	Rel 99 ME	Terminal Profile	Support
	with '90 00', Allowed, no modification									
	Send Short Message attempt by user, the SIM re	esponds	R98	1.9			M	M	E1/12	
	with '93 00	-								
C101	IF A.1/1 THEN M ELSE N/A	O_Cap_C	onf							
C102	void									
C103	void									
C104	IF A.1/2 THEN M ELSE N/A	O_Sust_t	ext							
C105	IF A.1/3 THEN M ELSE N/A	O_Ucs2_								
C106	IF A.1/4 THEN M ELSE N/A	O_Ext_St	r							
C107	IF A.1/5 THEN M ELSE N/A	O_Help								
C108	IF A.1/6 THEN (O.1 OR O.2) ELSE N/A	O_Icons								
C109	IF A.1/7 THEN M ELSE N/A	O_Dual_9								
C110	IF A.1/9 THEN M ELSE N/A		O_Run_At							
C111	IF A.1/10 THEN M ELSE N/A	O_LB								
C112	IF A.1/11 THEN M ELSE N/A	O_Soft_k	,							
C113	IF A.1/12 THEN M ELSE N/A	O_BIP_C	_							
C114	IF C110 AND C108 THEN M ELSE N/A	O_Run_A	_	ons						
C115	IF C111 AND C108 THEN M ELSE N/A	O_LB AN								
C116	IF C105 AND A.1/8 THEN M ELSE N/A			_Detach_Rdr						
C117	IF C111 AND C105 THEN M ELSE N/A	O_LB AN								
C118	IF A.1/14 THEN M ELSE N/A	O_Ucs2_	Disp							
C119	IF A.1/19 THEN M ELSE N/A	O_Redial								
C120	IF A.1/20 THEN M ELSE N/A	O_D_NoF								
C121	IF A.1/21 AND A.1/17 THEN M ELSE N/A	O_BIP_G		_						
C122	IF C111 AND A.1/16 THEN M ELSE N/A	O_LB AN	ID O_GPR	5						
C123	void									
C124	IF A.1/22, test x.A M ELSE x.B M (where x is									
0.1	IF (the ME supports icons as defined in record									
0.2	IF the ME supports icons as defined in record								aiue)	
0.3	IF (A.1/21 AND A.1/12) tests (x.A AND x.C) N	I ELSE IF A.1	/12 test x.1	R M (where x	is the exp	pected sequer	nce number	value)		

# 3.5 Conventions for mathematical notations

The conventions for mathematical notations specified in 3GPP TS 51.010-1 [12] clause 3.4 shall apply, unless otherwise specified in the present clause.

# 3.6 Conventions on electrical terms

The conventions on electrical terms specified in 3GPP TS 51.010-1 [12] clause 3.5 shall apply, unless otherwise specified in the present clause.

### 3.7 Terms on test conditions

The terms on test conditions specified in 3GPP TS 51.010-1 [12] clause 3.6 shall apply, unless otherwise specified in the present clause.

# 4 Test equipment

The test equipment is specified in 3GPP TS 51.010-1 [12] clause 4.

# 5 Testing methodology in general

# 5.1 Testing of optional functions and procedures

Any function or procedure which is optional, as indicated in the present document, may be subject to a conformance test if it is implemented in the ME.

# 5.2 Test interfaces and facilities

The test interfaces and facilities specified in 3GPP TS 51.010-1 [12] clause 5.2 shall apply, unless otherwise specified in the present clause.

The SIM interface provides the main test interface for the purpose of performing conformance tests.

# 5.3 Different protocol layers

The different protocol layers specified in 3GPP TS 51.010-1 [12] clause 5.3 shall apply, unless otherwise specified in the present clause.

# 5.4 Information to be provided by the apparatus supplier

The information to be provided by the apparatus supplier specified in 3GPP TS 51.010-1 [12] clause 5.4 shall apply, unless otherwise specified in the present clause.

In addition, the apparatus supplier shall provide the information with respect the Supported Option table A.1.

# 5.5 Definitions of transmit and receive times

The definitions of transmit and receive times specified in 3GPP TS 51.010-1 [12] clause 5.5 shall apply, unless otherwise specified in the present clause.

# 6 Reference test methods

The reference test methods specified in 3GPP TS 51.010-1 [12] clause 6 shall apply, unless otherwise specified.

# 7 Implicit testing

For some GSM features conformance is not verified explicitly in the present document. This does not imply that correct functioning of these features is not essential, but that these are implicitly tested to a sufficient degree in other tests.

It should be noted that for these features some aspects have to be and are explicitly tested, e.g. the ability to switch between 3v and 5v operation.

Some SIM features will be explicitly tested as result of other tests. These should be identified for the following reason:

- To identify the areas of overlap and thus provide a more efficient testing.

# 8 Measurement uncertainty

The measured value relating to the corresponding limit shall be used to determine whether or not a terminal equipment meets the requirement. (ETR 028, annex B).

This process is often referred to as "shared risk".

# 9 Format of tests

In general the following basic format for tests is used:

### 27.22.X.X. Tested command

27.22.X.X.1 Command tested in «environment #1" (NORMAL, ICONS, UCS2 ...)

### 27.22.X.X.1.1 Definition and applicability

This clause refers back to clause 3.2.2.

#### 27.22.X.X.1.2 Conformance requirement

Only if required, this clause details the necessary core specification references.

### 27.22.X.X.1.3 Test purpose

This clause details the purpose of the test.

#### **27.22.X.X.1.4** Method of test

#### 27.22.X.X.1.4.1 Initial conditions

If present this clause defines the initial conditions to be established before running each test sequence.

#### 27.22.X.X.1.4.2 Procedure

This clause details the test procedure. Each test sequence shall be carried out independently unless otherwise stated.

• Sequence 1.1 (further initial conditions, added here)

Command 1.1.1
TERMINAL RESPONSE1.1.1A or 1.1.1B
Command 1.1.2
TERMINAL RESPONSE1.1.2

PROACTIVE COMMAND 1.1.1

**TERMINAL RESPONSE 1.1.1A** 

TERMINAL RESPONSE 1.1.1B

PROACTIVE COMMAND 1.1.2

**TERMINAL RESPONSE 1.1.2** 

• Sequence 1.2

Command 1.2.1
TERMINAL RESPONSE 1.2.1
Command 1.2.2
TERMINAL RESPONSE 1.2.2 (same as TERMINAL RESPONSE 1.2.1)
Command 1.2.3
TERMINAL RESPONSE 1.2.3

PROACTIVE COMMAND 1.2.1

PROACTIVE COMMAND 1.2.2

PROACTIVE COMMAND 1.2.3

TERMINAL RESPONSE 1.2.1

TERMINAL RESPONSE 1.2.2

**TERMINAL RESPONSE 1.2.3** 

• Sequence 1.3

Command 1.3.1 TERMINAL RESPONSE1.3.1

PROACTIVE COMMAND 1.3.1

**TERMINAL RESPONSE 1.3.1** 

### 27.22.X.X.1.5 Test requirement

This clause details the conditions to be met for successful completion of the test.

27.22.X.X.2 Command tested in "environment #2" (NORMAL, ICONS, UCS2 ...)

27.22.X.X. 2.1 Definition and applicability

27.22.X.X. 2.2 Conformance requirement

**27.22.X.X. 2.3** Test purpose

#### 27.22.X.X. 2.4 Method of test

27.22.X.X. 2.4.1.1 Initial conditions

27.22.X.X. 2.4.1.2 Procedure

• Sequence 2.1

Command 2.1.1

TERMINAL RESPONSE2.1.1A or 2.1.1B

Command 2.1.2

TERMINAL RESPONSE2.1.2

PROACTIVE COMMAND 2.1.1

**TERMINAL RESPONSE 2.1.1A** 

**TERMINAL RESPONSE 2.1.1B** 

PROACTIVE COMMAND 2.1.2

**TERMINAL RESPONSE 2.1.2** 

• Sequence 2.2

Command 2.2.1

TERMINAL RESPONSE 2.2.1

Command 2.2.2

TERMINAL RESPONSE 2.2.2 (same as TERMINAL RESPONSE 2.2.1)

Command 2.2.3

TERMINAL RESPONSE 2.2.3

PROACTIVE COMMAND 2.2.1

PROACTIVE COMMAND 2.2.2

PROACTIVE COMMAND 2.2.3

Coding TERMINAL RESPONSE 2.2.1

Coding TERMINAL RESPONSE 2.2.2

Coding TERMINAL RESPONSE 2.2.3

27.22.X.X.2.5 Test requirement

# 10 Generic call set up procedures

The generic call set up procedure specified in 3GPP TS 51.010-1 [12] clause 10 shall apply, unless otherwise specified in the present clause.

# 11 - 26 Not used

# 27 Testing of the SIM/ME interface

This clause is an addition to 3GPP TS 51.010-1 [12] clause 27 to confirm the correct interpretation of the SIM Application Toolkit commands and the correct operation of the Toolkit facilities.

The definitions, declarations and default values specified in 3GPP TS 51.010-1 [12] clause 27 shall apply, unless otherwise specified in the present clause.

NOTE: As defined in 3GPP TS 51.010-1 [12] clause 27 the term PCS 1900 defines the tests applicable for GSM 700, GSM 850 and PCS 1900 MS.

A SIM Simulator with the appropriate SIM Application Toolkit functionality will be required. The SIM data defined below shall be used for all test cases unless otherwise specified within the test case.

The comprehension required flags in SIMPLE-TLV objects that are included in a TERMINAL RESPONSE or an ENVELOPE shall be set as described in TS 11.14 [15]. This means that in cases where it is up to the ME to decide if this flag is used or not, the corresponding Tag coding in the TERMINAL RESPONSEs and ENVELOPEs in this document represents only one of the two valid possibilities.

### 27.1 - 27.21 Void

# 27.22 SIM Application Toolkit

# 27.22.1A General Test purpose

Testing of functional conformance to SIM Application Toolkit commands, including pro-active SIM commands.

All facilities given by the TERMINAL PROFILE as supported, for which tests exist in the present document, shall be tested.

Many of the proactive SIM commands include an alpha identifier data object. This is intended to be a short one or two word identifier for the ME to optionally display on the screen along with any other indications, at the same time as the ME performs the SIM command.

NOTE: The sequence of SIM Application Toolkit commands are specific to the Toolkit Application being executed within the SIM, hence sequential testing of commands is not possible. The testing will therefore have to be performed on a command by command basis.

# 27.22.2A Definition of default values for SIM Application Toolkit testing

A SIM containing the following default values is used for all tests of this clause unless otherwise stated.

For each item, the logical default values and the coding within the Elementary Files (EF) of the SIM follow, as defined in:

• 3GPP TS 51. 010-1 [12], clause 27.

NOTE 1: Bx represents byte x of the coding.

NOTE 2: Unless otherwise defined, the coding values in binary.

#### EFSST (SIM Service Table)

#### Logically:

(Service 2)	Abbreviated Dialling Numbers allocated and activated
(Service 3)	Fixed Dialling Numbers allocated and activated
(Service 10)	Extension 1 allocated and activated
(Service 11)	Extension 2 allocated and activated
(Service 12)	SMS Parameters allocated and activated
(Service 14)	Cell Broadcast Message Identifier allocated and activated
(Service 25)	Data download via SMS-CB allocated and activated
(Service 26)	Data download via SMS-PP allocated and activated
(Service 27)	Menu selection allocated and activated
(Service 28)	Call control allocated and not activated

(Service 29) Proactive SIM allocated and activated

(Service 30) Cell Broadcast Message Identifier Ranges allocated and activated

(Service 31) Barred Dialling Numbers allocated and not activated

(Service 32) Extension4 allocated and activated

(Service 37) Mobile Originated Short Message control by SIM allocated and not activated

(Service 39) Image (IMG) allocated and activated

(Service 41) USSD string data object supported in Call Control allocated and activated

(Service 42) RUN AT COMMAND command allocated and activated

(Service 48) Extended Capability Configuration Parameters allocated and activated

Coding:	B1	B2	B3	B4
	xx1111xx	XXXXXXXX	1111111xx	xxxx11xx
	B5	B6	B7	B8
	XXXXXXXX	XXXXXXXX	01111111	11011111

B9	B10	B11	B12
xxxxxxx	xx11xx01	xxxx1111	11xxxxxx

### EF<sub>Phase</sub> (SIM Phase Identification)

Logically: Phase 2+

Coding: '03'

### EF<sub>IMSI</sub> (International Mobile Subscriber Identity)

Logically:

Length: 8 bytes

IMSI: 001 01 0123456789

Coding: '08 09 10 10 10 32 54 76 98'

### EF<sub>CBMI</sub> (Cell Broadcast Message Identifier)

Logically:

Cell Broadcast Message Identifier 1: '0C 0C'

Coding: 0C 0C FF ... FF

### EF<sub>CBMID</sub> (Cell Broadcast Message Identifier for Data Download)

Logically:

Cell Broadcast Message Identifier 1: '10 01'

Coding: 10 01 FF .. FF

# EF<sub>FDN</sub> (Fixed Dialling Numbers)

Logically:

At least 10 records

Record 1:

Length of alpha identifier: 32 characters Alpha identifier: "ABC"

Length of BCD number: "03"

TON and NPI: Telephony and Unknown

Dialled number: 123
CCI: None
Ext2: None

Coding:	B1	B2	В3	B4	 B32	B33	B34	B35	B36	B37	 B46
Record 1:	41	42	43	FF	 FF	03	81	21	F3	FF	 FF

Record 2:

Length of alpha identifier: 32 characters
Alpha identifier: "DEF"
Length of BCD number: "04"

TON and NPI: Telephony and Unknown

Dialled number: 9876
CCI: None
Ext2: None

Coding:	B1	B2	В3	B4	 B32	B33	B34	B35	B36	B37	 B46
Record 1:	44	45	46	FF	 FF	03	81	89	67	FF	 FF

### EF<sub>BDN</sub> (Barred Dialling Numbers)

### Logically:

### At least 10 records

Record 1:

Length of alpha identifier: 32 characters
Alpha identifier: "CBA"
Length of BCD number: "03"

TON and NPI: Telephony and Unknown

Dialled number: 321
CCI: None
Ext4: None
Comparison Method Info: None

Coding:	B1	B2	В3	B4	 B32	B33	B34	B35	B36	B37	 B46
Record 1:	43	42	41	FF	 FF	03	81	23	F1		 FF

NOTE: EF<sub>BDN</sub> shall be invalidated unless otherwise stated, i.e. by indicating that Barred Dialling Numbers

service is enabled.

### EF<sub>ECC</sub> (Emergency Call Codes)

### Logically:

Emergency Call Code 1: '1020'

Coding:		01	02	FF		

Emergency Call Code 2: '112'

Coding:	11	F2	FF	

### EF<sub>SMSP</sub> (Short message service parameters)

### Logically:

Record 1:

Record length: 28 bytes

Parameter Indicators:

TP-Destination Address: Parameter absent
TS-Service Centre Address: Parameter present
TP-Protocol Identifier: Parameter absent
TP-Data Coding Scheme: Parameter absent
TP-Validity Period: Parameter absent

TS-Service Centre Address:

TON: International Number

NPI: "ISDN / telephone numbering plan"

Dialled number string: "112233445566778"

Coding:	B1	B2	В3	 B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23
Record 1:	FD	FF	FF	 FF	09	91	11	22	33	44	55	66	77	F8

B24	B25	B26	B27	B28
FF	FF	FF	FF	FF

#### For the display of icon:

- Under the DF Telecom: creation of DF Graphics (5F50);
- Under the DF 5F50: creation of  $EF_{Img}$  (4F20, linear fixed file) and  $EF_{Instance}$  (4FXX, transparent file).

#### EF<sub>Imq</sub> (Image, 4F20)

#### Record 1:

#### Logically:

Number of Actual Images Instances: 01 Image Instance Width: 08 Image Instance Height: 08

Image Coding Scheme: 11 (basic image)
Image Instance File Identifier: 4F 04 (EF<sub>Instance</sub>)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 0A

#### Coding:

Coding:	01	08	08	11	4F	04	00	00	00	0A	FF	FF
•	FF											

#### Record 2:

#### Logically:

Number of Actual Images Instances: 01 Image Instance Width: 08 Image Instance Height: 08

 $\begin{array}{ll} \mbox{Image Coding Scheme:} & 21 \mbox{ (colour image)} \\ \mbox{Image Instance File Identifier:} & 4F \mbox{ } 02 \mbox{(} EF_{\mbox{Instance}}) \\ \end{array}$ 

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 16

Coding:	01	08	08	21	4F	02	00	00	00	16	FF	FF
	FF											

#### Record 3:

#### Logically:

Number of Actual Images Instances: 01 Image Instance Width: 18 Image Instance Height: 10

Image Coding Scheme:11 (basic image)Image Instance File Identifier:4F 03 (EFInstance)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 32

#### Coding:

Coding:	01	18	10	11	4F	03	00	00	00	32	FF	FF
	FF											

#### Record 4:

#### Logically:

Number of Actual Images Instances: 01 Image Instance Width: 2E Image Instance Height: 28

Image Coding Scheme:11 (basic image)Image Instance File Identifier:4F 01 (EFInstance)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 E8

#### Coding:

Coding:	01	2E	28	11	4F	01	00	00	00	E8	FF	FF
	FF											

### Record 5:

#### Logically:

Number of Actual Images Instances: 01 Image Instance Width: 05 Image Instance Height: 05

Image Coding Scheme: 11 (basic image)
Image Instance File Identifier: 4F 05 (EF<sub>Instance</sub>)

Offset into Image Instance File: 00 00 Length of Image Instance Data: 00 08

#### Coding:

Coding:	01	05	05	11	4F	05	00	00	00	08	FF	FF
	FF	FF	FF	FF	FF	FF						

## EF<sub>Instance</sub> (4F01)

#### Logically:

Image Instance Data: see below

Coding:	2E	28	00	00	00	00	00	00	00	01	FF	80
	00	00	00	0F	FF	00	00	00	00	77	FE	00
	00	00	01	BF	F8	00	00	00	06	FF	E0	00
	00	00	1A	03	80	00	00	00	6B	F6	BC	00
	00	01	AF	D8	38	00	00	06	BF	60	20	00
	00	1A	FD	80	40	00	00	6B	F6	00	80	00
	01	A0	1F	02	00	00	06	FF	E4	04	00	00
	1B	FF	90	10	00	00	6D	EE	40	40	00	01
	BF	F9	01	00	00	6F	FF	E4	04	00	00	1B
	FF	90	10	00	00	6F	FE	40	40	00	01	BF
	F9	01	00	00	06	FF	E6	04	00	00	1B	FF
	88	10	00	00	6F	FE	20	40	00	01	BF	F8
	66	00	00	06	FF	E0	F0	00	00	1B	FF	80
	80	00	00	7F	FE	00	00	00	03	00	0C	00
	00	00	1F	FF	F8	00	00	00	00	00	00	00
	00	00	00	00	00	00	00	00	00	00	00	00
	1C	21	08	44	EE	00	48	C4	31	92	20	01
	25	11	45	50	80	07	14	45	15	43	80	12
	71	1C	4D	08	00	4A	24	89	32	20	01	C8
	9E	24	4E	E0								

## EF<sub>Instance</sub> (4F02)

Logically:

Image Instance Data:

Image width:08Image length:08Bits per raster image point:02Number of CLUT entries:03Location of CLUT:00 16Image body:see below

Coding:

Coding:	08	80	02	03	00	16	AA	AA	80	02	85	42
	81	42	81	42	81	52	80	02	AA	AA	FF	00
	00	00	FF	00	00	00	FF					

## EF<sub>Instance</sub> (4F03)

Logically:

Image Instance Data: see below

Coding:

Coding:	18	10	FF	FF	FF	80	00	01	80	00	01	80
	00	01	8F	3C	F1	89	20	81	89	20	81	89
	20	F1	89	20	11	89	20	11	89	20	11	8F
	3C	F1	80	00	01	80	00	01	80	00	01	FF
	FF	FF										

## EF<sub>Instance</sub> (4F04)

Logically:

Image Instance Data: see below

Coding:	08	08	FF	03	A5	99	99	A5	C3	FF

## EF<sub>Instance</sub> (4F05)

Logically:

Image Instance Data: see below

Coding:

Coding:	05	05	FE	EB	BF	FF	FF	FF

# 27.22.1 Initialization of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)

## 27.22.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.1.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in:

• 3GPP TS 11.14 [15] clause 5.2.

## 27.22.1.3 Test purpose

To verify that the ME sends a TERMINAL PROFILE command in accordance with the above requirements.

#### 27.22.1.4 Method of test

#### 27.22.1.4.1 Initial conditions

The ME is connected to the SIM Simulator. All elementary files are coded as the default Toolkit personalization, with the CHV1 enabled.

## 27.22.1.4.2 Procedure

## **Expected Sequence 1 (PROFILE DOWNLOAD)**

Step	Direction	Message / Action	Comments
1	$USER \to ME$	Power on ME	
2	$ME \rightarrow USER$	PIN entry request	
3	$USER \to ME$	Enter "1111"	
 4 5	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	VERIFY CHV1 1.1A VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A	[CHV1 code: "1111"]
6 7	$\begin{array}{c} ME \to USER \\ USER \to ME \end{array}$	PIN entry request Enter "1234"	
8 9	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	VERIFY CHV1 1.1B NORMAL ENDING OF COMMAND 1.1A	[CHV1 code: "1234"]
10	$ME \rightarrow SIM$	TERMINAL PROFILE 1.4	The ME shall have read EF PHASE prior to the Profile Download
11	$SIM \to ME$	NORMAL ENDING OF COMMAND 1.1A	
12	$ME \rightarrow SIM$	SELECT EF IMSI 1.5 or SELECT EF LOCI 1.6	

**VERIFY CHV1: 1.1A** 

Logically:

Coding:

APD	U:	CLA=A0 IN		S=20 P1=00		2=01	P3=08	
DATA IN:	31	31	31	31	FF	FF	FF	FF

## **VERIFY CHV1 ATTEMPT UNSUCCESSFUL: 1.1A**

Logically:

Coding:

SW1=98 SW2=04

**VERIFY CHV1: 1.1B** 

Logically:

Coding:

APD	U:	CLA=A0 INS=20			=00 P	2=01	P3=08	
DATA IN:	31	32	33	34	FF	FF	FF	FF

**NORMAL ENDING OF COMMAND: 1.1A** 

Logically:

Coding:

SW1=90	SW2=00
--------	--------

**TERMINAL PROFILE: 1.4** 

Logically:

Coding:

APDU:	CLA=A0	INS=10	P1=00	P2=00	P3=XX
_					
	DATA IN:	YY	ZZ		

With XX representing the length of the following DATA IN depending on the SIM Toolkit commands supported by the ME, and with YY, ZZ, ... representing here the bytes of the TERMINAL PROFILE data, as specified in 3GPP TS 11.14 [15], clause 5.2.

**SELECT EF IMSI: 1.5** 

Logically:

Coding:

APDU:	CLA=A0	INS:	=A4	P1=	:00	P2=00	P3=02
	DATAIN			-   07			_
	DATA IN	I:	6F		07		

**SELECT EF LOCI: 1.6** 

Logically:

Coding:

APDU:	CLA=A0	INS:	=A4	P1=00		P2=00	P3=02
							_
	DATA IN	DATA IN:			7E		

## 27.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.

## 27.22.2 Contents of the TERMINAL PROFILE command

## 27.22.2.1 Definition and applicability

See table E.1.

## 27.22.2.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in:

• 3GPP TS 11.14 [15] clause 5.2.

### 27.22.2.3 Test purpose

- 1. Verify that the TERMINAL PROFILE indicates that Profile Download facility is supported.
- 2. Record which SIM Application Toolkit facilities are supported by the ME, to determine which subsequent tests are required.

#### 27.22.2.4 Method of test

#### 27.22.2.4.1 Initial conditions

The ME is connected to the SIM Simulator. All elementary files are coded as the default SIM Application Toolkit personalization.

#### 27.22.1.4.2 Procedure

- a) The ME is powered on.
- b) After the ME sends the TERMINAL PROFILE command to the SIM Simulator, the SIM Simulator shall record the content of the TERMINAL PROFILE.
- c) The SIM Simulator shall return SW1 / SW2 of '90 00'.
- d) The contents of the TERMINAL PROFILE is recorded and compared to the corresponding table E.1 "status" column.

The test is terminated upon the ME sending the TERMINAL PROFILE command to the SIM Simulator.

### 27.22.2.5 Test requirement

- 1) After step a) the ME shall send the TERMINAL PROFILE command to the SIM Simulator with bit 1 of the first byte set to 1 (facility supported by ME).
- 2) In table E.1 for the corresponding ME Sim Toolkit Release and Options, The TERMINAL PROFILE information "support" recorded must be in accordance with the "Status" column.

## 27.22.3 Servicing of proactive SIM commands

#### 27.22.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.3.2 Conformance requirement

On detection of a pending SIM Application Toolkit command from the SIM the ME shall perform the FETCH command to retrieve the proactive SIM command. The result of the executed command shall be transmitted from the ME to the SIM within a TERMINAL RESPONSE command.

The MORE TIME proactive command is used in this test. The ME shall have knowledge of this command, but may not support this SIM Application Toolkit facility.

• 3GPP TS 11.14 [15] clause 6.3.

### 27.22.3.3 Test purpose

To verify that the ME uses the FETCH command to obtain the proactive SIM command, after detection of a pending proactive SIM command. The pending proactive SIM command is indicated by the response parameters '91 xx' from the SIM.

To verify that the ME transmits the result of execution of the proactive SIM command to the SIM in the TERMINAL RESPONSE command.

#### 27.22.3.4 Method of test

#### 27.22.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as the SIM Application Toolkit default.

The SIM Simulator is configured to indicate that a proactive SIM command is pending.

The SIM Simulator is configured to monitor the SIM - ME interface.

#### 27.22.3.4.2 Procedure

- a) The ME is powered on.
- b) After the ME has performed the PROFILE DOWNLOAD procedure, the SIM Simulator indicates that a Proactive SIM Command is pending with SW1 / SW2 of '91 0B'.
- c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

## 27.22.3.5 Test requirement

- 1) After step b) the ME shall send the FETCH command to the SIM.
- 2) After step c) the ME shall send the TERMINAL REPONSE command with command number "01", type of command "02" and command qualifier "00".

#### 27.22.4 Proactive SIM commands

#### 27.22.4.1 DISPLAY TEXT

### 27.22.4.1.1 DISPLAY TEXT (Normal)

#### 27.22.4.1.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.1.1.2 Conformance requirements

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15], clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

#### 27.22.4.1.1.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.1.1.4 Method of test

#### 27.22.4.1.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.1.1.4.2 Procedure

## Expected Sequence 1.1 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
		DISPLAY TEXT 1.1.1	message, unpacked, 8 bit data]
4	$ME \to USER$	Display "Toolkit Test 1"	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.1.1	
7	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

#### PROACTIVE COMMAND: DISPLAY TEXT 1.1.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 1"

Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	31								

#### TERMINAL RESPONSE: DISPLAY TEXT 1.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

## Expected Sequence 1.2 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, screen busy)

Step	Direction	MESSAGE / Action	Comments
1	$USER \to ME$	Set the ME screen to a display	The ME will be set to a mode so that normal
		mode other than the normal	priority text commands shall be rejected.
		stand-by display	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.2.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Normal priority]
		DISPLAY TEXT 1.2.1	
5	$ME \rightarrow USER$	No change of the currently being	
		used display.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[ME currently unable to process command -
		DISPLAY TEXT 1.2.1	screen busy]
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: DISPLAY TEXT 1.2.1: same as 1.1.1

TERMINAL RESPONSE: DISPLAY TEXT 1.2.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional information: Screen is busy

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	02	20	
	01												

## Expected Sequence 1.3 (DISPLAY TEXT, high priority, Unpacked 8 bit data for Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	The ME screen is in a mode other than the
		PENDING: DISPLAY TEXT 1.3.1	normal stand by display.
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[High priority]
		DISPLAY TEXT 1.3.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 2"	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$	TERMINAL RESPONSE:	
		DISPLAY TEXT 1.3.1	
7	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
8	$USER \to ME$	Set the ME screen back to normal	
		stand-by display	

PROACTIVE COMMAND: DISPLAY TEXT 1.3.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: high priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data Text: "Toolkit Test 2"

Coding:

BER-TLV:	D0	1A	81	03	01	21	81	82	02	81	02	8D
·	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	32								

TERMINAL RESPONSE: DISPLAY TEXT 1.3.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: high priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	81	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

#### Expected Sequence 1.4 (DISPLAY TEXT, Packed, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.4.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Packed, SMS default alphabet]
		DISPLAY TEXT 1.4.1	
4	$ME \to USER$	Display "Toolkit Test 3"	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.4.1	

PROACTIVE COMMAND: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: packed, SMS default alphabet

Text: "Toolkit Test 3"

Coding:

BER-TLV:	D0	19	81	03	01	21	80	82	02	81	02	8D
	0E	00	D4	F7	9B	BD	4E	D3	41	D4	F2	9C
	0E	9A	01									

TERMINAL RESPONSE: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00
	• .											

#### Expected Sequence 1.5 (DISPLAY TEXT, Clear message after delay, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Clear message after a delay]
		DISPLAY TEXT 1.5.1	
4		Display "Toolkit Test 4" and clear	
		this message after a short delay	
5	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.5.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: DISPLAY TEXT 1.5.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, clear message after a delay

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 4"

BER-TLV:	D0	1A	81	03	01	21	00	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	34								

TERMINAL RESPONSE: DISPLAY TEXT 1.5.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

1

Command qualifier: normal priority, clear message after a delay

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	0.4	03	01	24	00	0.2	02	0.0	0.4	0.2	01	00
DEK-ILV.	01	03	UI		00	02	02	02	01	೦೦	UI	00

#### Expected Sequence 1.6 (DISPLAY TEXT, Text string with 160 bytes, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Text string with 160 bytes - maximum for non
		DISPLAY TEXT 1.6.1	extension text]
4	$ME \rightarrow USER$	Display "This command instructs	
		the ME to display a text message.	
		It allows the SIM to define the	
		priority of that message, and the	
		text string format. Two types of	
		prio"	
5			
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	Command performed successfully
		DISPLAY TEXT 1.6.1	

## PROACTIVE COMMAND: DISPLAY TEXT 1.6.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data

Text: "This command instructs the ME to display a text message. It allows the SIM to

define the priority of that message, and the text string format. Two types of prio"

BER-TLV:	D0	81	AD	81	03	01	21	80	82	02	81	02
	8D	81	A1	04	54	68	69	73	20	63	6F	6D
	6D	61	6E	64	20	69	6E	73	74	72	75	63

74	73	20	74	68	65	20	4D	45	20	74	6F
20	64	69	73	70	6C	61	79	20	61	20	74
65	78	74	20	6D	65	73	73	61	67	65	2E
20	49	74	20	61	6C	6C	6F	77	73	20	74
68	65	20	53	49	4D	20	74	6F	20	64	65
66	69	6E	65	20	74	68	65	20	70	72	69
6F	72	69	74	79	20	6F	66	20	74	68	61
74	20	6D	65	73	73	61	67	65	2C	20	61
6E	64	20	74	68	65	20	74	65	78	74	20
73	74	72	69	6E	67	20	66	6F	72	6D	61
74	2E	20	54	77	6F	20	74	79	70	65	73
20	6F	66	20	70	72	69	6F				

TERMINAL RESPONSE: DISPLAY TEXT 1.6.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81	03 01	21	80	82	02	82	81	83	01	00	1
-------------	-------	----	----	----	----	----	----	----	----	----	---

## Expected Sequence 1.7 (DISPLAY TEXT, Backward move in SIM session, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		DISPLAY TEXT 1.7.1	
4	$ME \rightarrow USER$	Display " <go-backwards>"</go-backwards>	
5	$USER \to ME$	Indicate the need to go backwards	
		in the proactive SIM application	
		session	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Backward move in the proactive SIM session
		DISPLAY TEXT 1.7.1	requested by the user]

PROACTIVE COMMAND: DISPLAY TEXT 1.7.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<GO-BACKWARDS>"

#### Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
	0F	04	3C	47	4F	2D	42	41	43	4B	57	41
	52	44	53	3E								

TERMINAL RESPONSE: DISPLAY TEXT 1.7.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Backward move in the proactive SIM session requested by the user

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	11
----------	----	----	----	----	----	----	----	----	----	----	----	----

#### Expected Sequence 1.8 (DISPLAY TEXT, session terminated by user)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		DISPLAY TEXT 1.8.1	
4	$ME \rightarrow USER$	Display " <abort>"</abort>	
5	$USER \rightarrow ME$	Indicate the need to end the	
		proactive SIM application session	
6	$ME \to SIM$	TERMINAL RESPONSE:	[Proactive SIM session terminated by the
		DISPLAY TEXT 1.8.1	user]
7	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: DISPLAY TEXT 1.8.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<ABORT>"

BER-TLV:	D0	13	81	03	01	21	80	82	02	81	02	8D
_	08	04	3C	41	42	4F	52	54	3E			

TERMINAL RESPONSE: DISPLAY TEXT 1.8.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	10

## Expected Sequence 1.9 (DISPLAY TEXT, icon and text to be displayed, no text string given, not understood by ME)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.9.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Including icon identifier, icon shall be
			displayed together with the alpha text string, but no text string given
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command data not understood by ME
		DISPLAY TEXT 1.9.1	(clause 6.5.4)]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

#### PROACTIVE COMMAND: DISPLAY TEXT 1.9.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text string

Contents: null data object

Icon Identifier:

Icon qualifier: icon is self-explanatory Icon Identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	0F	81	03	01	21	80	82	02	81	02	8D
	00	9E	02	00	01							

**TERMINAL RESPONSE: DISPLAY TEXT 1.9.1** 

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

BER-TLV: 81 03	01 21	80 82	02 82	81 83		32
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#### 27.22.4.1.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.9.

#### 27.22.4.1.2 DISPLAY TEXT (Support of "No response from user")

#### 27.22.4.1.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.1.2.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

## 27.22.4.1.2.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.1.2.4 Method of test

#### 27.22.4.1.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time.

The SIM simulator shall be set to that period of time.

#### 27.22.4.1.2.4.2 Procedure

### **Expected Sequence 2.1 (DISPLAY TEXT, no response from user)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 2.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
		DISPLAY TEXT 2.1.1	message, unpacked, 8 bit data]
4	$ME \rightarrow USER$	Display " <time-out>"</time-out>	

6	$ME \to SIM$	TERMINAL RESPONSE:	[No response from user] within 5 s after the
		DISPLAY TEXT 2.1.1	end of that defined period of time
7	$SIM \to ME$	PROACTIVE SIM SESSION	·
		ENDED	

#### PROACTIVE COMMAND: DISPLAY TEXT 2.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<TIME-OUT>"

Coding:

BER-TLV:	D0	16	81	03	01	21	80	82	02	81	02	8D
	0B	04	3C	54	49	4D	45	2D	4F	55	54	3E

#### TERMINAL RESPONSE: DISPLAY TEXT 2.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: No response from user

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	12
DEIX IEV.	01	00	01	'	00	02	02	02	01	00	01	'-

## 27.22.4.1.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.1.3 DISPLAY TEXT (Display of extension text)

#### 27.22.4.1.3.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.1.3.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

#### 27.22.4.1.3.3 Test purpose

To verify that the ME displays the extension text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.3.4 Method of test

27.22.4.1.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.1.3.4.2 Procedure

#### **Expected Sequence 3.1 (DISPLAY TEXT, display of the extension text)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Text string with the maximum of 240 bytes]
		DISPLAY TEXT 3.1.1	
4	$ME \rightarrow USER$	Display "This command instructs	
		the ME to display a text message,	
		and/or an icon (see clause 6.5.4).	
		It allows the SIM to define the	
		priority of that message, and the	
		text string format. Two types of	
		priority are defined:- display	
_		normal priority text and/"	
5		Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 3.1.1	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

## PROACTIVE COMMAND: DISPLAY TEXT 3.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data

Text: "This command instructs the ME to display a text message and/or an icon (see

clause 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/"

BER-TLV:	D0	81	FD	81	03	01	21	80	82	02	81	02
	8D	81	F1	04	54	68	69	73	20	63	6F	6D
	6D	61	6F	64	20	69	6F	73	74	72	75	63

74	73	20	74	68	65	20	4D	45	20	74	6F
20	64	69	73	70	6C	61	79	20	61	20	74
65	78	74	20	6D	65	73	73	61	67	65	2C
20	61	6E	64	2F	6F	72	20	61	6E	20	69
63	6F	6E	20	28	73	65	65	20	36	2E	35
2E	34	29	2E	20	49	74	20	61	6C	6C	6F
77	73	20	74	68	65	20	53	49	4D	20	74
6F	20	64	65	66	69	6E	65	20	74	68	65
20	70	72	69	6f	72	69	74	79	20	6F	66
20	74	68	61	74	20	6D	65	73	73	61	67
65	2C	20	61	6E	64	20	74	68	65	20	74
65	78	74	20	73	74	72	69	6E	67	20	66
6F	72	6D	61	74	2E	20	54	77	6F	20	74
79	70	65	73	20	6F	66	20	70	72	69	6F
72	69	74	79	20	61	72	65	20	64	65	66
69	6E	65	64	3A	2D	20	64	69	73	70	6C
61	79	20	6E	6F	72	6D	61	6C	20	70	72
69	6F	72	69	74	79	20	74	65	78	74	20
61	6E	64	2F								

TERMINAL RESPONSE: DISPLAY TEXT 3.1.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00	]
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## 27.22.4.1.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

#### 27.22.4.1.4 DISPLAY TEXT (Sustained text)

## 27.22.4.1.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.1.4.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.1, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.43.

### 27.22.4.1.4.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, returns a successful result in the TERMINAL RESPONSE command send to the SIM and sustain the display beyond sending the TERMINAL response.

27.22.4.1.4.4 Method of test

27.22.4.1.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.1.4.4.2 Procedure

#### Expected Sequence 4.1 (DISPLAY TEXT, sustained text, unpacked data 8 bits, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
		DISPLAY TEXT 4.1.1	message, unpacked, 8 bit data]
4	$ME \rightarrow USER$	Display "Toolkit Test 1"	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 4.1.1	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
8	$ME \to USER$	Display of "Toolkit Test 1" shall	Text shall sustain until - a subsequent
		sustain	proactive command is received containing
			display data.

## PROACTIVE COMMAND: DISPLAY TEXT 4.1.1

#### Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 1"

Immediate Response

## Coding:

BER-TLV:	D0	1C	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	31	AB	00						

#### TERMINAL RESPONSE: DISPLAY TEXT 4.1.1

#### Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

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Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

#### Expected Sequence 4.2 (DISPLAY TEXT, sustained text, clear message after delay, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Clear message after a delay]
		DISPLAY TEXT 4.2.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 2"	
5	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 4.2.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$ME \rightarrow USER$	Display "Toolkit Test 2"	Text shall sustain until - the expiration of a
			short delay.

## PROACTIVE COMMAND: DISPLAY TEXT 4.2.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, clear message after a delay

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 2"

Immediate Response

Coding:

BER-TLV:	D0	1C	81	03	01	21	00	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	32	AB	00						

#### TERMINAL RESPONSE: DISPLAY TEXT 4.2.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, clear message after a delay

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	l 81	03	01	21	00	82	02	82	81	83	01	00
D			<b>.</b>		00		V-	U_	01		<b>.</b>	

#### Expected Sequence 4.3 (DISPLAY TEXT, sustained text, wait for user MMI to clear, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 4.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[wait for user to clear message]
		DISPLAY TEXT 4.3.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 3"	
5	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 4.3.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$ME \rightarrow USER$	Display of "Toolkit Test 3"	Text shall sustain until - a user MMI action.
8	$USER \to ME$	Clear message	

PROACTIVE COMMAND: DISPLAY TEXT 4.3.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data Text: "Toolkit Test 3"

Immediate Response

Coding:

BER-TLV:	D0	1C	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	33	AB	00						

TERMINAL RESPONSE: DISPLAY TEXT 4.3.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

## Expected Sequence 4.4 (DISPLAY TEXT, sustained text, wait for high priority event to clear, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 4.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[wait for user to clear message]
		DISPLAY TEXT 4.4.1	
4	$ME \rightarrow USER$	Display "Toolkit Test 4"	
5	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 4.4.1	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$ME \rightarrow USER$	Display of "Toolkit Test 4"	Text shall sustain until - a higher priority event
			occurs.
8	$SS \to ME$	INCOMING MOBILE	
		TERMINATED CALL	

PROACTIVE COMMAND: DISPLAY TEXT 4.4.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 4"

Immediate Response

Coding:

BER-TLV:	D0	1C	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	34	AB	00						

TERMINAL RESPONSE: DISPLAY TEXT 4.4.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-T	.V:	81	03	01	21	80	82	02	82	81	83	01	00	
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#### 27.22.4.1.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.4.

## 27.22.4.1.5 DISPLAY TEXT (Display of icons)

#### 27.22.4.1.5.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.1.5.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

#### 27.22.4.1.5.3 Test purpose

To verify that the ME displays the icons which are referred to in the contents of the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.1.5.4 Method of test

#### 27.22.4.1.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.1.5.4.2 Procedure

#### Expected Sequence 5.1A (DISPLAY TEXT, display of basic icon, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[BASIC-ICON, self-explanatory]
		DISPLAY TEXT 5.1.1	
4	$ME \rightarrow USER$	Display the BASIC-ICON	
5	$USER \rightarrow ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 5.1.1A	

#### PROACTIVE COMMAND: DISPLAY TEXT 5.1.1

## Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Basic Icon"

Icon Identifier:

Icon qualifier: icon is self-explanatory Icon Identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
_	0B	04	42	61	73	69	63	20	49	63	6F	6E
	9E	02	00	01								

TERMINAL RESPONSE: DISPLAY TEXT 5.1.1A

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 00

## Expected Sequence 5.1B (DISPLAY TEXT, display of basic icon, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[BASIC-ICON, self-explanatory]
		DISPLAY TEXT 5.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without icon	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$		[Command performed successfully, but
		DISPLAY TEXT 5.1.1B	requested icon could not be displayed]

TERMINAL RESPONSE: DISPLAY TEXT 5.1.1B

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 04

#### Expected Sequence 5.2A (DISPLAY TEXT, display of colour icon, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[COLOUR-ICON]
		DISPLAY TEXT 5.2.1	
4	$ME \rightarrow USER$	Display the COLOUR-ICON	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 5.2.1A	

PROACTIVE COMMAND: DISPLAY TEXT 5.2.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Colour Icon"

Icon Identifier:

Icon qualifier: icon is self-explanatory Icon Identifier: record 2 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	1B	81	03	01	21	80	82	02	81	02	8D
	0C	04	43	6F	6C	6F	75	72	20	49	63	6F
	6E	9E	02	00	02							

TERMINAL RESPONSE: DISPLAY TEXT 5.2.1A

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

## Expected Sequence 5.2B (DISPLAY TEXT, display of colour icon, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[COLOUR-ICON]
		DISPLAY TEXT 5.2.1	
4	$ME \rightarrow USER$	Display "Colour Icon" without the	
		icon	
5	$USER \to ME$	Clear Message	
6	$ME \to SIM$	TERMINAL RESPONSE:	[Command performed successfully, but
			requested icon could not be displayed]
			1

TERMINAL RESPONSE: DISPLAY TEXT 5.2.1B

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	04	1
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## Expected Sequence 5.3A (DISPLAY TEXT, display of basic icon, not self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[BASIC-ICON, not self-explanatory]
		DISPLAY TEXT 5.3.1	
4	$ME \rightarrow USER$	Display the BASIC-ICON	
		And	
		Display "Basic Icon"	
5	$USER \to ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 5.3.1A	
7	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: DISPLAY TEXT 5.3.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Basic Icon"

Icon Identifier:

Icon qualifier: icon is not self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

#### Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
	0B	04	42	61	73	69	63	20	49	63	6F	6E
	9E	02	01	01								

#### TERMINAL RESPONSE: DISPLAY TEXT 5.3.1A

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	00

## Expected Sequence 5.3B (DISPLAY TEXT, display of basic icon, not self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 5.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[BASIC-ICON, not self-explanatory]
		DISPLAY TEXT 5.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$USER \to ME$	Clear Message	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully, but
		DISPLAY TEXT 5.3.1B	requested icon could not be displayed]
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

TERMINAL RESPONSE: DISPLAY TEXT 5.3.1B

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

	BER-TLV:	81	03	01	21	80	82	02	82	81	83	01	04
--	----------	----	----	----	----	----	----	----	----	----	----	----	----

#### 27.22.4.1.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1A to 5.3B.

### 27.22.4.1.6 DISPLAY TEXT (UCS2 display supported)

#### 27.22.4.1.6.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.1.6.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.1, clause 6.5.4, clause 6.6.1, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

The ME shall support the UCS2 alphabet for the coding of the Cyrillic alphabet, as defined in the following technical specification: ISO/IEC 10646 [17].

## 27.22.4.1.6.3 Test purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.6.4 Method of test

27.22.4.1.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.1.6.4.2 Procedure

## **Expected Sequence 6.1 (DISPLAY TEXT, UCS2 coded)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 6.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
		DISPLAY TEXT 6.1.1	message, UCS2 coded]
4	$ME \to USER$		["Hello" in Russian]
		Display " ЗДРАВСТВУЙТЕ "	
5	$USER \to ME$	Clear message	
6	$ME \to SIM$	TERMINAL RESPONSE:	
		DISPLAY TEXT 6.1.1	

#### PROACTIVE COMMAND: DISPLAY TEXT 6.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: UCS2 (16bit)

Text: "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	24	81	03	01	21	80	82	02	81	02	8D
	19	08	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15										

#### TERMINAL RESPONSE: DISPLAY TEXT 6.1.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

R-TLV: 81	31 03 01	21 80	82 02	82	81	83	01	00
-----------	----------	-------	-------	----	----	----	----	----

## 27.22.4.1.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1.

#### 27.22.4.2 GET INKEY

#### 27.22.4.2.1 GET INKEY(normal)

#### 27.22.4.2.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.2.1.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

#### 27.22.4.2.1.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the single character entered in the TERMINAL RESPONSE command sent to the SIM.

#### 27.22.4.2.1.4 Method of test

#### 27.22.4.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be set to a display other than the idle display.

#### 27.22.4.2.1.4.2 Procedure

## Expected Sequence 1.1 (GET INKEY, digits only for character, Unpacked 8 bit data for Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, no help info available]
		INKEY 1.1.1	
4	$ME \rightarrow USER$	Display "Enter "+""	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 1.1.1	

#### PROACTIVE COMMAND: GET INKEY 1.1.1

#### Logically:

Command details

Command number:

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data Text: "Enter "+" "

Coding:

BER-TLV:	D0	15	81	03	01	22	00	82	02	81	82	8D
	0A	04	45	6E	74	65	72	20	22	2B	22	

#### TERMINAL RESPONSE: GET INKEY 1.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

## Expected Sequence 1.2 (GET INKEY, digits only for character set, SMS default Alphabet for Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, no help info available]
		INKEY 1.2.1	
4	$ME \to USER$	Display "Enter "0""	
			Text string coding in packed format
5	$USER \to ME$	Enter the input "0" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[command performed successfully]
		GET INKEY 1.2.1	

#### PROACTIVE COMMAND: GET INKEY 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: SMS default alphabet

Text: "Enter "0""

#### Coding:

BER-TLV:	D0	14	81	03	01	22	00	82	02	81	82	8D
	09	00	45	37	BD	2C	07	89	60	22		

TERMINAL RESPONSE: GET INKEY 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data

Text: "0"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
_	8D	02	04	30								

## **Expected Sequence 1.3 (GET INKEY, backward move)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, no help information available]
		INKEY 1.3.1	
4	$ME \rightarrow USER$	Display " <go-backwards>"</go-backwards>	
			Text string coding in unpacked format
5	$USER \rightarrow ME$	Backwards move MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[backward move in the proactive SIM session
		INKEY 1.3.1	requested by the user]

#### PROACTIVE COMMAND: GET INKEY 1.3.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<GO-BACKWARDS>"

BER-TLV:	D0	1A	81	03	01	22	00	82	02	81	82	8D
_	0F	04	3C	47	4F	2D	42	41	43	4B	57	41
	52	44	53	3E								

TERMINAL RESPONSE: GET INKEY 1.3.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

	BE	R-TLV:	81	03	01	22	00	82	02	82	81	83	01	11
--	----	--------	----	----	----	----	----	----	----	----	----	----	----	----

#### **Expected Sequence 1.4 (GET INKEY, abort)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, no help information available]
		INKEY 1.4.1	
4	$ME \rightarrow USER$	Display " <abort>"</abort>	Text string coding in unpacked format
5	$USER \to ME$	Terminate the Proactive SIM	
		session MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Proactive SIM session terminated by the
		INKEY 1.4.1	user]

#### PROACTIVE COMMAND: GET INKEY 1.4.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<ABORT>"

Coding:

BER-TLV:	D0	13	81	03	01	22	00	82	02	81	82	8D
	80	04	3C	41	42	4F	52	54	3E			

TERMINAL RESPONSE: GET INKEY 1.4.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV: 81 03 01 22 00 82 02 82 81 83 01
---

## Expected Sequence 1.5 (GET INKEY, SMS default alphabet for character set, Unpacked 8 bit data for Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[characters from SMS default alphabet, no
		INKEY 1.5.1	help info available]
4	$ME \rightarrow USER$	Display "Enter "q""	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "q" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 1.5.1	

#### PROACTIVE COMMAND: GET INKEY 1.5.1

#### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter "q""

Coding:

BER-TLV:	D0	15	81	03	01	22	01	82	02	81	82	8D
	0A	04	45	6E	74	65	72	20	22	71	22	

#### **TERMINAL RESPONSE: GET INKEY 1.5.1**

#### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "q"

Coding:

BER-TLV:	81	03	01	22	01	82	02	82	81	83	01	00
	8D	02	04	71								

## Expected Sequence 1.6 (GET INKEY, Max length for the Text String, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, no help info available]
		INKEY 1.6.1	
4	$ME \rightarrow USER$	Display "Enter "x". This	
		command instructs the ME to	160 characters Text string coding in
		display text, and to expect the	unpacked format
		user to enter a single character.	
		Any response entered by the	
		user shall be passed t"	
5	$USER \to ME$	Enter the input "x" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 1.6.1	

PROACTIVE COMMAND: GET INKEY 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter "x". This command instructs the ME to display text, and to expect the user to

enter a single character. Any response entered by the user shall be passed t"

BER-TLV:	D0	81	AD	81	03	01	22	01	82	02	81	82
	8D	81	A1	04	45	6E	74	65	72	20	22	78
	22	2E	20	54	68	69	73	20	63	6F	6D	6D
	61	6E	64	20	69	6E	73	74	72	75	63	74
	73	20	74	68	65	20	4D	45	20	74	6F	20
	64	69	73	70	6C	61	79	20	74	65	78	74
	2C	20	61	6E	64	20	74	6F	20	65	78	70
	65	63	74	20	74	68	65	20	75	73	65	72
	20	74	6F	20	65	6E	74	65	72	20	61	20
	73	69	6E	67	6C	65	20	63	68	61	72	61
	63	74	65	72	2E	20	41	6E	79	20	72	65
	73	70	6F	6E	73	65	20	65	6E	74	65	72
	65	64	20	62	79	20	74	68	65	20	75	73
	65	72	20	73	68	61	6C	6C	20	62	65	20
	70	61	73	73	65	64	20	74				

TERMINAL RESPONSE: GET INKEY 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "x

Coding:

BER-TLV:	81	03	01	22	01	82	02	82	81	83	01	00
·	8D	02	04	78								

## 27.22.4.2.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

#### 27.22.4.2.2 GET INKEY (No response from User)

## 27.22.4.2.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.2.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

## 27.22.4.2.2.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the SIM.

## 27.22.4.2.2.4 Method of test

#### 27.22.4.2.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time.

The SIM simulator shall be set to that period of time.

## 27.22.4.2.2.4.2 Procedure

# Expected Sequence 2.1 (GET INKEY, no response from the user)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, no help information available]
		INKEY 2.1.1	
4	$ME \rightarrow USER$	Display " <time-out>"</time-out>	
			Text string coding in unpacked format
5	USER	Waiting and no completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[No response from user] within 5 s after the
		INKEY 2.1.1	end of that defined period of time
7	USER	Check the delay of TERMINAL	
		RESPONSE is reasonable or not	

PROACTIVE COMMAND: GET INKEY 2.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "<TIME-OUT>"

Coding:

BER-TLV:	D0	16	81	03	01	22	00	82	02	81	82	8D
	0B	04	3C	54	49	4D	45	2D	4F	55	54	3E

TERMINAL RESPONSE: GET INKEY 2.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: No response from user

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	12

27.22.4.2.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.2.3 GET INKEY (UCS2 format display)

## 27.22.4.2.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.3.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

#### 27.22.4.2.3.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

## 27.22.4.2.3.4 Method of test

#### 27.22.4.2.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

## 27.22.4.2.3.4.2 Procedure

## Expected Sequence 3.1 (GET INKEY, Text String coding in UCS2 Alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[Digits only, no help information available]
		INKEY 3.1.1	
4	$ME \rightarrow USER$	Display " ЗДРАВСТВУЙТЕ "	Text string "Hello" in Russian coding in 16 bits
			UCS2 alphabet format
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 3.1.1	

## PROACTIVE COMMAND: GET INKEY 3.1.1

#### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: 16 bit data UCS2 alphabet format

Техt: "ЗДРАВСТВУЙТЕ "

Coding:

BER-TLV:	D0	24	81	03	01	22	00	82	02	81	82	8D
	19	08	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15										

**TERMINAL RESPONSE: GET INKEY 3.1.1** 

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 3.2 (GET INKEY, max length for the Text String coding in UCS2 Alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, no help information available]
		INKEY 3.2.1	
4	$ME \rightarrow USER$	Display	
		"ЗДРАВСТВУЙТЕЗДРАВСТВУ	Text string length 70 characters, coding in 16
			bits UCS2 alphabet format
		ВУЙТЕЗДРАВСТВУЙТЕЗДРАВ	
		СТВУЙ"	
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 3.2.1	

PROACTIVE COMMAND: GET INKEY 3.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM

Destination device: ME

**Text String** 

Data coding scheme:16 bit data UCS2 alphabet formatText:"ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ

ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Coding:

BER-TLV:	D0	81	99	81	03	01	22	00	82	02	81	82
	8D	81	8D	08	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19

TERMINAL RESPONSE: GET INKEY 3.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

27.22.4.2.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1 to 3.2.

27.22.4.2.4 GET INKEY (UCS2 format of entry)

27.22.4.2.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.2.4.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

## 27.22.4.2.4.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.4.4 Method of test

27.22.4.2.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.2.4.4.2 Procedure

## Expected Sequence 4.1 (GET INKEY, characters from UCS2 alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[characters from UCS2 alphabet, no help
		INKEY 4.1.1	information available]
4	$ME \rightarrow USER$	Display "Enter"	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "Д"	Russian character, coding in UCS2 format
		and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INKEY 4.1.1	

## PROACTIVE COMMAND: GET INKEY 4.1.1

#### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter"

BER-TLV:	D0	11	81	03	01	22	03	82	02	81	82	8D
	06	04	45	6E	74	65	72					

TERMINAL RESPONSE: GET INKEY 4.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: characters from UCS2 alphabet, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: 16 bit data UCS2 alphabet format

Text: "Д'

Coding:

BER-TLV:	81	03	01	22	03	82	02	82	81	83	01	00
_	8D	03	08	04	14							

## 27.22.4.2.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1.

## 27.22.4.2.5 GET INKEY ("Yes/No" Response)

## 27.22.4.2.5.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.2.5.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2 and clause 12.15.3.

## 27.22.4.2.5.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

## 27.22.4.2.5.4 Method of test

#### 27.22.4.2.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

## 27.22.4.2.5.4.2 Procedure

# Expected Sequence 5.1(GET INKEY, "Yes/No" Response for the input, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET INKEY 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INKEY 5.1.1	["Yes/No" Response, no help information available]
4	$ME \rightarrow USER$	Display "Enter YES "	Text string coding in unpacked format
5	$USER \to ME$	Choice "Yes" and Completion	
6	ME → SIM	TERMINAL RESPONSE: GET INKEY 5.1.1	[command performed successfully] Check if it is in accordance with the user choice (value '01' in the Text String data object)
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET INKEY 5.1.2	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INKEY 5.1.2	["Yes/No" Response, no help information available]
10	$ME \rightarrow USER$	Display "Enter NO:"	Text string coding in unpacked format
11	$USER \to ME$	Choice "No" and Completion	
12	ME → SIM	TERMINAL RESPONSE: GET INKEY 5.1.2	[command performed successfully] Check if it is in accordance with the user choice (value '00' in the Text String data object)

## PROACTIVE COMMAND: GET INKEY 5.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data Text: "Enter YES"

## Coding:

BER-TLV:	D0	15	81	03	01	22	04	82	02	81	82	8D
	0A	04	45	6E	74	65	72	20	59	45	53	

## TERMINAL RESPONSE: GET INKEY 5.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: 01 (hex)

Coding:

BER-TLV:	81	03	01	22	04	82	02	82	81	83	01	00
	8D	02	04	01								

## PROACTIVE COMMAND: GET INKEY 5.1.2:

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter NO"

Coding:

BER-TLV:	D0	14	81	03	01	22	04	82	02	81	82	8D
	09	04	45	6E	74	65	72	20	4E	4F		

## TERMINAL RESPONSE: GET INKEY 5.1.2

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: "Yes/No" Response, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: 00 (hex)

Coding:

BER-TLV:	81	03	01	22	04	82	02	82	81	83	01	00
·	8D	02	04	00								

## 27.22.4.2.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

## 27.22.4.2.6 GET INKEY (display of Icon)

## 27.22.4.2.6.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.6.2 Conformance requirement

The ME shall support the GET INKEY command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

## 27.22.4.2.6.3 Test purpose

To verify that the ME displays the Icon contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.6.4 Method of test

27.22.4.2.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.2.6.4.2 Procedure

## Expected Sequence 6.1A (GET INKEY, Basic icon, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON self-explanatory for the Text
		INKEY 6.1.1	string]
4	$ME \rightarrow USER$	Display the BASIC-ICON for the	
		prompt	
			Text string coding in unpacked format
5	$USER \to ME$	Enter "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	Command performed successfully]
		INKEY 6.1.1A	

## PROACTIVE COMMAND: GET INKEY 6.1.1

# Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 1 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	19	81	03	01	22	00	82	02	81	82	8D
	0A	04	3C	4E	4F	2D	49	43	4F	4E	3E	1E
	02	00	01									

TERMINAL RESPONSE: GET INKEY 6.1.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.1B (GET INKEY, Basic icon, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[BASIC-ICON self-explanatory for the Text
		INKEY 6.1.1	string]
4	$ME \rightarrow USER$	Display " <no-icon>" for the</no-icon>	
		prompt without the icon	
			Text string coding in unpacked format
5	$USER \to ME$	Enter "+" and completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INKEY 6.1.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INKEY 6.1.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data

Text· "\_"

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	04
	8D	02	04	2B								

# Expected Sequence 6.2A (GET INKEY, Basic icon, non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
		INKEY 6.2.1	Text string]
4	$ME \rightarrow USER$	Display " <basic-icon>" and</basic-icon>	
		Display the BASIC-ICON for the	
		prompt	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$		[Command performed successfully]
		INKEY 6.2.1A	

## PROACTIVE COMMAND: GET INKEY 6.2.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "<BASIC-ICON>"

Icon Identifier

Icon qualifier: not self-explanatory

Icon identifier: 1 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	1C	81	03	01	22	00	82	02	81	82	8D
	0D	04	3C	42	41	53	49	43	2D	49	43	4F
	4E	3E	1E	02	01	01						

## TERMINAL RESPONSE: GET INKEY 6.2.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.2B (GET INKEY, Basic icon, non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
2	$ME \rightarrow SIM$	PENDING: GET INKEY 6.2.1 FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INKEY 6.2.1	[BASIC-ICON non self-explanatory for the Text string]
4	$ME \rightarrow USER$	Display " <basic-icon>" for the prompt without the icon</basic-icon>	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INKEY 6.2.1B	[Command performed successfully, but requested icon could not be displayed]

TERMINAL RESPONSE: GET INKEY 6.2.1B

Logically:

Command details

Command number:

Command type: **GET INKEY** 

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

unpacked, 8 bit data "+" Data coding scheme:

	BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	04
I		8D	02	04	2B								

## Expected Sequence 6.3A (GET INKEY, Colour icon, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON self-explanatory for the Text
		INKEY 6.3.1	string]
4	$ME \rightarrow USER$	Display the COLOUR-ICON for	
		the prompt	
			Text string coding in unpacked format
			Text Stillig coding in dispacked format
5	USER → ME	Enter the input "+" and	
		completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
		INKEY 6.3.1A	

PROACTIVE COMMAND: GET INKEY 6.3.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 2 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	19	81	03	01	22	00	82	02	81	82	8D	l
	0A	04	3C	4E	4F	2D	49	43	4F	4E	3E	1E	l
	02	00	02										l

TERMINAL RESPONSE: GET INKEY 6.3.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.3B (GET INKEY, Colour icon, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON self-explanatory for the Text
		INKEY 6.3.1	string]
4	$ME \rightarrow USER$	Display " <no-icon>"for the</no-icon>	
		prompt without the icon	
			Text string coding in unpacked format
			and great gr
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INKEY 6.3.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INKEY 6.3.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data

Text:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	04
	βD	02	04	2B								

## Expected Sequence 6.4A (GET INKEY, Colour icon, non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON non self-explanatory for the
		INKEY 6.4.1	Text string]
4	$ME \rightarrow USER$	Display " <colour-icon>" and</colour-icon>	
		Display the COLOUR-ICON for	
		the prompt	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
		INKEY 6.4.1A	

#### PROACTIVE COMMAND: GET INKEY 6.4.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<COLOUR-ICON>"

Icon Identifier

Icon qualifier: not self-explanatory

Icon identifier: 2 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	1D	81	03	01	22	00	82	02	81	82	8D
	0E	04	3C	43	4F	4C	4F	55	52	2D	49	43
	4F	4F	3F	1F	02	01	02					

## TERMINAL RESPONSE: GET INKEY 6.4.1A

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

BER-TLV: 81 03 01	22	00	82	02	82	81	83	01	00
-------------------	----	----	----	----	----	----	----	----	----

8D	02	11.14	2B				

# Expected Sequence 6.4B (GET INKEY, Colour icon, non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 6.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON non self-explanatory for the
		INKEY 6.4.1	Text string]
4	$ME \rightarrow USER$	Display " <colour-icon>" for</colour-icon>	
		the prompt without the icon	
			Total states a soulis as in common local forms of
_		Futurate a impost that and	Text string coding in unpacked format
5	USER → ME	Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INKEY 6.4.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INKEY 6.4.1B

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

## Coding:

BER-TLV:	81	03	01	22	00	82	02	82	81	83	01	04
	8D	02	04	2B								

## 27.22.4.2.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 6.1A to 6.4B.

## 27.22.4.2.7 GET INKEY (Help Information)

## 27.22.4.2.7.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.2.7.2 Conformance requirement

The ME shall support the GET INKEY command as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.2, clause 6.5.4, clause 6.6.2, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.31.

## 27.22.4.2.7.3 Test purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

#### 27.22.4.2.7.4 Method of test

#### 27.22.4.2.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.2.7.4.2 Procedure

# **Expected Sequence 7.1 (GET INKEY, help information available)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INKEY 7.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INKEY 7.1.1	[digits only, help information available]
4	$ME \rightarrow USER$	Display "Enter "+""	
			Text string coding in unpacked format
5	$USER \to ME$	Press "help" key	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INKEY 7.1.1	[help info required]
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: DISPLAY TEXT 7.1.1	
8	$ME \to SIM$	FETCH	
9	$SIM \to ME$	PROACTIVE COMMAND: DISPLAY TEXT 7.1.1	
10	$ME \rightarrow USER$	Display "Help information"	Text string coded in unpacked format
11	$USER \to ME$	Clear Message	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: DISPLAY TEXT 7.1.1	
13	$SIM \to ME$	PROACTIVE COMMAND PENDING: GET INKEY 7.1.2	
14	$ME \to SIM$	FETCH	
15	$SIM \to ME$	PROACTIVE COMMAND: GET INKEY 7.1.2	[digits only, help information available]
16	$ME \rightarrow USER$	Display "Enter "+""	Repetition of get inkey
17	$USER \to ME$	Enter the input "+" and completion	incependion of gentificey
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INKEY 7.1.2	[Command performed successfully]

## PROACTIVE COMMAND: GET INKEY 7.1.1

#### Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: SIM Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter "+""

Coding:

BER-TLV:	D0	15	81	03	01	22	80	82	02	81	82	8D
	0A	04	45	6E	74	65	72	20	22	2B	22	

TERMINAL RESPONSE: GET INKEY 7.1.1

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Help information required by the user

Coding:

BER-TLV: 81 03 01 22 80 82 02 82 81 83 01 13

PROACTIVE COMMAND: DISPLAY TEXT 7.1.1

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Help information"

Coding:

BER-TLV: D0 1C 81 03 01 21 80 82 02 81 02 8D 11 48 65 6C 70 20 69 6E 66 72 6D 61 74 69 6F 6E

**TERMINAL RESPONSE: DISPLAY TEXT 7.1.1** 

Logically:

Command details

Command number: 1

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TL	/: 81	03	01	21	80	82	02	82	81	83	01	00	1
--------	-------	----	----	----	----	----	----	----	----	----	----	----	---

## PROACTIVE COMMAND: GET INKEY 7.1.2

Logically:

Command details

Command number: 1

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Enter "+""

Coding:

BER-TLV:	D0	15	81	03	01	22	80	82	02	81	82	8D
	0A	04	45	6E	74	65	72	20	22	2B	22	

#### **TERMINAL RESPONSE: GET INKEY 7.1.2**

Logically:

Command details

Command number:

Command type: GET INKEY

Command qualifier: digits (0-9, \*, # and +) only, help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String:

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	22	80	82	02	82	81	83	01	00
	8D	02	04	2B								

## 27.22.4.2.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

## 27.22.4.3. GET INPUT

## 27.22.4.3.1 GET INPUT (normal)

## 27.22.4.3.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.3.1.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

#### 27.22.4.3.1.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

## 27.22.4.3.1.4 Method of test

#### 27.22.4.3.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.3.1.4.2 Procedure

# Expected Sequence 1.1 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INPUT 1.1.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help info
			available]
4	$ME \rightarrow USER$	Display "Enter 12345"	Range of expected length is 5-5
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "12345" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 1.1.1	

## PROACTIVE COMMAND: GET INPUT 1.1.1

#### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "Enter 12345"

Response length

Minimum length: 5 Maximum length: 5

BER-TLV:	D0	1B	81	03	01	23	00	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	31	32	33	34
	35	91	02	05	05							

TERMINAL RESPONSE: GET INPUT 1.1.1

Logically:

Command details

Command number:

Command type: GET INPUT

1

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	06	04	31	32	33	34	35				

# Expected Sequence 1.2 (GET INPUT, digits only, SMS default alphabet, ME to echo text, packing SMS Point-to-point required by ME)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.2.1	text, packing required, no help information
			available]
4	$ME \rightarrow USER$	Display "Enter 67*#+""	Range of expected length is 5-5
			Text string coding in packed format
5	$USER \to ME$	Enter the input "67*#+"" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 1.2.1	

PROACTIVE COMMAND: GET INPUT 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in packed SMS format, ME

to echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: SMS default alphabet Text: "Enter 67\*#+""

Response length

Minimum length: 5 Maximum length: 5

Coding:

BER-TLV:	D0	1A	81	03	01	23	08	82	02	81	82	8D
	0B	00	45	37	BD	2C	07	D9	6E	AA	D1	0A
	91	02	05	05								

TERMINAL RESPONSE: GET INPUT 1.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in packed SMS format, ME

to echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: packed SMS format

Text: "67\*#+""

Coding:

BER-TLV:	81	03	01	23	80	82	02	82	81	83	01	00
	8D	06	00	B6	9B	6A	B4	02				

# Expected Sequence 1.3 (GET INPUT, character set, SMS Default Alphabet, ME to echo text, ME supporting 8 bit data Message)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INPUT 1.3.1	[character set, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display "Enter AbCdE"	Range of expected length is 5-5 Text string coding in unpacked format
5	$USER \to ME$	Enter the input "AbCdE" and completion	The ME may echo the input
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INPUT 1.3.1	[command performed successfully]

PROACTIVE COMMAND: GET INPUT 1.3.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: Character set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data Text: "Enter AbCdE"

Response length

Minimum length: 5 Maximum length: 5

Coding:

BER-TLV:	D0	1B	81	03	01	23	01	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	41	62	43	64
	45	91	02	05	05							

**TERMINAL RESPONSE: GET INPUT 1.3.1** 

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: Character set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "AbCdE"

Coding:

BER-TLV:	81	03	01	23	01	82	02	82	81	83	01	00	
	8D	06	04	41	62	43	64	45					ĺ

# Expected Sequence 1.4 (GET INPUT, digits only, SMS default alphabet, ME to hide text, ME supporting 8 bit data Message)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to hide
		INPUT 1.4.1	text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display	Range of expected length is 4-8
		"Password 1 <send>2345678"</send>	Text string coding in unpacked format
5	$USER \to ME$	Enter the input "2345678" and completion	User's input not to be revealed at any time, optionally indication of key entries such as by displaying "*"
6	$ME \rightarrow USER$	Input not revealed	optionally indication of key entries such as by displaying "*"
7	$ME \rightarrow SIM$		[command performed successfully]
		INPUT 1.4.1	

PROACTIVE COMMAND: GET INPUT 1.4.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

hide text, no help information available

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "Password 1<SEND>2345678"

Response length

Minimum length: 4 Maximum length: 8

Coding:

BER-TLV:	D0	27	81	03	01	23	04	82	02	81	82	8D
	18	04	50	61	73	73	77	6F	72	64	20	31
	3C	53	45	4E	44	3E	32	33	34	35	36	37
	38	91	02	04	08							

## TERMINAL RESPONSE: GET INPUT 1.4.1

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

hide text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "2345678"

BER-TLV:	81	03	01	23	04	82	02	82	81	83	01	00
	8D	08	04	32	33	34	35	36	37	38		

# Expected Sequence 1.5 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

Direction	MESSAGE / Action	Comments
$SIM \to ME$	PROACTIVE COMMAND	
	PENDING: GET INPUT 1.5.1	
$ME \to SIM$	FETCH	
$SIM \to ME$		[digits only, SMS default alphabet, ME to echo
	INPUT 1.5.1	text, packing not required, no help information
		available]
$ME \to USER$	Display "Enter 19,09,0(1)"	Range of expected length is 1-20
		Text string coding in unpacked format
$USER \to ME$	Completion without input	
	T. 145 1414	
$ME \rightarrow USER$		
	,	
HOED ME		
USER → ME		
ME SIM		[command parformed successfully]
IVI⊏ → SIIVI		[command performed successfully]
	$\begin{array}{c} \text{SIM} \rightarrow \text{ME} \\ \text{ME} \rightarrow \text{SIM} \\ \text{SIM} \rightarrow \text{ME} \\ \\ \text{ME} \rightarrow \text{USER} \\ \\ \text{USER} \rightarrow \text{ME} \\ \\ \text{ME} \rightarrow \text{USER} \\ \\ \text{USER} \rightarrow \text{ME} \\ \\ \end{array}$	SIM → ME PROACTIVE COMMAND PENDING: GET INPUT 1.5.1  ME → SIM FETCH PROACTIVE COMMAND: GET INPUT 1.5.1  ME → USER Display "Enter 19,09,0(1)"  USER → ME Completion without input  ME → USER The ME MMI takes action to manage the entry of correct numbers of characters.  USER → ME Enter "12345678901234567890" and completion

## PROACTIVE COMMAND: GET INPUT 1.5.1

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Enter 1..9,0..9,0(1)"

Response length

Minimum length: 1 Maximum length: 20

## Coding:

BER-TLV:	D0	24	81	03	01	23	00	82	02	81	82	8D
	15	04	45	6E	74	65	72	20	31	2E	2E	39
	2C	30	2E	2E	39	2C	30	28	31	29	91	02
	01	14										

# TERMINAL RESPONSE: GET INPUT 1.5.1

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data
Text: "12345678901234567890"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	15	04	31	32	33	34	35	36	37	38	39
	30	31	32	33	34	35	36	37	38	39	30	

# Expected Sequence 1.6 (GET INPUT, backwards move)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.6.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display " <go-backwards>"</go-backwards>	Range of expected length is 0-8
			Text string coding in unpacked format
5	$USER \to ME$	Backwards move MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[backward move in the proactive SIM session
		INPUT 1.6.1	requested by the user]

## PROACTIVE COMMAND: GET INPUT 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
Text: "<GO-BACKWARDS>"

Response length

Minimum length: 0 Maximum length: 8

Coding:

BER-TLV:	D0	1E	81	03	01	23	00	82	02	81	82	8D
_	0F	04	3C	47	4F	2D	42	41	43	4B	57	41
	52	44	53	3E	91	02	00	08				

## TERMINAL RESPONSE: GET INPUT 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	11

## **Expected Sequence 1.7 (GET INPUT, abort)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.7.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.7.1	text, packing not required, no help information
			available]
4	$ME \to USER$	Display " <abort>"</abort>	Range if expected length is 0-8
			Text string coding in unpacked format
5	$USER \to ME$	Terminate the Proactive SIM	
		session MMI action	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Proactive SIM session terminated by the
		INPUT 1.7.1	user]

# PROACTIVE COMMAND: GET INPUT 1.7.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<ABORT>"

Response length

Minimum length: 0 Maximum length: 8

Coding:

BER-TLV:	D0	17	81	03	01	23	00	82	02	81	82	8D
	08	04	3C	41	42	4F	52	54	3E	91	02	00
	08											

## TERMINAL RESPONSE: GET INPUT 1.7.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	10

# Expected Sequence 1.8 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET INPUT 1.8.1	[digits only, SMS default alphabet, ME to echo text, packing not required, no help information available]
4	$ME \rightarrow USER$		Range of length expected is 160-160
		"***111111111###***2222222	Text string coding in unpacked format
		222###***333333333###***44	
		4444444###***555555555	
		#***6666666666###***7777777	
		777###***888888888###***99	
		9999999###***000000000##  #"	
5	$USER \to ME$	Enter the input	
		"***111111111###***2222222	
		222###***333333333###***44	
		4444444###***555555555##	
		#***6666666666###***7777777	
		777###***888888888###***99	
		9999999###***000000000##  #"	
		and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INPUT 1.8.1	[command performed successfully]

## PROACTIVE COMMAND: GET INPUT 1.8.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME

to echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*222222222###\*\*\*333333333###\*\*\*44444444###\*\*\*

555555555###\*\*\*666666666###\*\*\*77777777###\*\*\*888888888###\*\*\*9999

99999###\*\*\*0000000000###"

Response length

Minimum length: 160 Maximum length: 160

BER-TLV:	D0	81	B1	81	03	01	23	00	82	02	81	82
	8D	81	A1	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	31	23	23	23	2A	2A	2A	32
	32	32	32	32	32	32	32	32	32	23	23	23
	2A	2A	2A	33	33	33	33	33	33	33	33	33
	33	23	23	23	2A	2A	2A	34	34	34	34	34
	34	34	34	34	34	23	23	23	2A	2A	2A	35
	35	35	35	35	35	35	35	35	35	23	23	23
	2A	2A	2A	36	36	36	36	36	36	36	36	36
	36	23	23	23	2A	2A	2A	37	37	37	37	37
	37	37	37	37	37	23	23	23	2A	2A	2A	38
	38	38	38	38	38	38	38	38	38	23	23	23
	2A	2A	2A	39	39	39	39	39	39	39	39	39
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	30	30	30	30	30	23	23	23	91	02	A0	A0

**TERMINAL RESPONSE: GET INPUT 1.8.1** 

Logically:

Command details

Command number:

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*222222222###\*\*\*

33333333###\*\*\*4444444### \*\*\*5555555555###\*\*\*666666666### \*\*\*77777777###\*\*\*88888888### \*\*\*999999999###\*\*\*0000000000###"

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	81	A1	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	31	23	23	23	2A	2A	2A	32
	32	32	32	32	32	32	32	32	32	23	23	23
	2A	2A	2A	33	33	33	33	33	33	33	33	33
	33	23	23	23	2A	2A	2A	34	34	34	34	34
	34	34	34	34	34	23	23	23	2A	2A	2A	35
	35	35	35	35	35	35	35	35	35	23	23	23
	2A	2A	2A	36	36	36	36	36	36	36	36	36
	36	23	23	23	2A	2A	2A	37	37	37	37	37
	37	37	37	37	37	23	23	23	2A	2A	2A	38
	38	38	38	38	38	38	38	38	38	23	23	23
	2A	2A	2A	39	39	39	39	39	39	39	39	39
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	30	30	30	30	30	23	23	23				

# Expected Sequence 1.9 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.9.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.9.1	text, packing not required, no help information available]
4	$ME \to USER$	Display " <send>"</send>	Range of expected length is 0-1
			Text string coding in unpacked format
5	$USER \to ME$	Completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 1.9.1A	
		Or	
		TERMINAL RESPONSE: GET	
		INPUT 1.9.1B	

#### PROACTIVE COMMAND: GET INPUT 1.9.1

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<SEND>"

Response length

Minimum length: 0 Maximum length: 1

Coding:

BER-TLV:	D0	16	81	03	01	23	00	82	02	81	82	8D
·	07	04	3C	53	45	4E	44	3E	91	02	00	01

## TERMINAL RESPONSE: GET INPUT 1.9.1A

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: empty string

## Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	01	04									

TERMINAL RESPONSE: GET INPUT 1.9.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Contents: Null data object

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	00										

## Expected Sequence 1.10 (GET INPUT, null length for the text string, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 1.10.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 1.10.1	text, packing not required, no help info
			available]
4	$ME \rightarrow USER$	Request for input	Range of expected length is 1-5
			Null Text string
5	$USER \to ME$	Enter the input "12345" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 1.10.1	

PROACTIVE COMMAND: GET INPUT 1.10.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text string

Text: length null (00).

Response length

Minimum length: 1 Maximum length: 5

## Coding:

BER-TLV:	D0	0F	81	03	01	23	00	82	02	81	82	8D
	00	91	02	01	05							

TERMINAL RESPONSE: GET INPUT 1.10.1

Logically:

Command details

Command number:

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
·	8D	06	04	31	32	33	34	35				

## 27.22.4.3.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.10.

## 27.22.4.3.2 GET INPUT (No response from User)

## 27.22.4.3.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.3.2.2 Conformance requirement

The ME shall support the GET INPUT command as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

## 27.22.4.3.2.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns a "No response from user" result value in the TERMINAL RESPONSE command send to the SIM.

27.22.4.3.2.4 Method of test

27.22.4.3.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the "no response from user" period of time.

The SIM simulator shall be set to that period of time.

# 27.22.4.3.2.4.2 Procedure

## **Expected Sequence 2.1 (GET INPUT, no response from the user)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$		[digits only, SMS default alphabet
		INPUT 2.1	ME to echo text, packing not required, no help
			information available]
4	$ME \rightarrow USER$	Display " <time-out>"</time-out>	Range of expected length is 0-10
			Text string coding in unpacked format
5	USER	Waiting and no completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[No response from user] within 5 s after the
		INPUT 2.1.1	end of that defined period of time

## PROACTIVE COMMAND: GET INPUT 2.1.1

#### Logically:

Command details

Command number:

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "<TIME-OUT>"

Response length

Minimum length: 0 Maximum length: 10

## Coding:

BER-TLV:	D0	1A	81	03	01	23	00	82	02	81	82	8D
	0B	04	3C	54	49	4D	45	2D	4F	55	54	3E
	91	02	00	0A								

## TERMINAL RESPONSE: GET INPUT 2.1.1

## Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: No response from user

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	12
		00			00	02	02	02		00		12

## 27.22.4.3.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

# 27.22.4.3.3 GET INPUT (UCS2 format display)

## 27.22.4.3.3.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.3.3.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

## 27.22.4.3.3.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

## 27.22.4.3.3.4 Method of test

#### 27.22.4.3.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.3.3.4.2 Procedure

## Expected Sequence 3.1 (GET INPUT, text string coding in UCS2, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 3.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display " ЗДРАВСТВУЙТЕ "	Range of expected length is 5-5
			Text string "Hello" in Russian coding in 16 bits
			UCS2 alphabet format
5	$USER \to ME$	Enter the input "HELLO" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 3.1.1	

#### PROACTIVE COMMAND: GET INPUT 3.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: 16 bit data UCS2 alphabet format

Техt: "ЗДРАВСТВУЙТЕ "

Response length

Minimum length: 5 Maximum length: 5

Coding:

BER-TLV:	D0	28	81	03	01	23	01	82	02	81	82	8D
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	91	02	05	05						

#### **TERMINAL RESPONSE: GET INPUT 3.1.1**

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "HELLO"

BER-TLV:	81	03	01	23	01	82	02	82	81	83	01	00
	8D	06	04	48	45	4C	4C	4F				

# Expected Sequence 3.2 (GET INPUT, max length for the text string coding in UCS2, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 3.2.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display	Range of expected length is 5-5
		"ЗДРАВСТВУЙТЕЗДРАВСТВ	Text string length 70 characters, coding in 16
		УЙТЕ	bits UCS2 alphabet format
		ЗДРАВСТВУЙТЕЗДРАВСТВ	
		УЙТЕ	
		ЗДРАВСТВУЙТЕЗДРАВСТВУЙ	
		"	
5	$USER \to ME$	Enter the input "HELLO" and	
		completion	
6	····- / •····	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 3.2.1	

#### PROACTIVE COMMAND: GET INPUT 3.2.1

# Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme:16 bit data UCS2 alphabet formatText:"ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ

ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Response length

Minimum length: 5 Maximum length: 5

BER-TLV:	D0	81	9D	81	03	01	23	01	82	02	81	82
	8D	81	8D	08	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	91	02	05	05								

TERMINAL RESPONSE: GET INPUT 3.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: alphabet set, SMS default alphabet, input in unpacked format, ME to echo text, no

help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "HELLO"

Coding:

BER-TLV:	81	03	01	23	01	82	02	82	81	83	01	00
	8D	06	04	48	45	4C	4C	4F				

#### 27.22.4.3.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.2.

# 27.22.4.3.4 GET INPUT (UCS2 format of entry)

#### 27.22.4.3.4.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.3.4.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in ISO/IEC 10646 [17].

#### 27.22.4.3.4.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

### 27.22.4.3.4.4 Method of test

# 27.22.4.3.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.3.4.4.2 Procedure

# Expected Sequence 4.1 (GET INPUT, character set from UCS2 alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[character set, UCS2 alphabet, ME to echo
		INPUT 4.1.1	text, packing not required, no help information available]
4	$ME \rightarrow USER$	Display "Enter Hello"	Range of expected length is 12-12 Text string coding in unpacked format
5	$USER \to ME$	Enter the input "ЗДРАВСТВУЙТЕ "	"Hello" in Russian, coding in UCS2 format
6	$ME \rightarrow SIM$	and completion TERMINAL RESPONSE: GET INPUT 4.1.1	[command performed successfully]

#### PROACTIVE COMMAND: GET INPUT 4.1.1

### Logically:

Command details

Command number:

Command type: GET INPUT

Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help

information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Enter Hello"

Response length

Minimum length: 12 Maximum length: 12

# Coding:

BER-TLV:	D0	1B	81	03	01	23	03	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	48	65	6C	6C
	6F	91	02	0C	0C							

# **TERMINAL RESPONSE: GET INPUT 4.1.1**

# Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help

information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: UCS2

Text: "ЗДРАВСТВУЙТЕ"

BER-TLV:	81	03	01	23	03	82	02	82	81	83	01	00
	8D	19	08	04	17	04	14	04	20	04	10	04
	12	04	21	04	22	04	12	04	23	04	19	04
	22	04	15									

# Expected Sequence 4.2 (GET INPUT, character set from UCS2 alphabet, Max length for the input, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[character set, UCS2 alphabet, ME to echo
		INPUT 4.2.1	text, packing not required, no help information
			available]
4	$ME \rightarrow USER$	Display	Range of expected length is no limit
		"Enter Hello"	Text string coding in unpacked format
5	$USER \to ME$		Input length 70 characters, coding in UCS2
		ogn mbe ibi mileogi mbe ib	format
		УЙТЕ	
		ЗДРАВСТВУЙТЕЗДРАВСТВ	
		УЙТЕ	
		ЗДРАВСТВУЙТЕЗДРАВСТВУЙ	
		and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 4.2.1	

# PROACTIVE COMMAND: GET INPUT 4.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help

information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Enter Hello"

Response length

Minimum length: 5

Maximum length: No maximum length requirement

BER-TLV:	D0	1B	81	03	01	23	03	82	02	81	82	8D	
	0C	04	45	6E	74	65	72	20	48	65	6C	6C	
	6F	91	02	05	FF								

TERMINAL RESPONSE: GET INPUT 4.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help

information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Data coding scheme: UCS2

Техt: "ЗДРАВСТВУЙТЕ...ЗДРАВСТВУЙ" (70 chars)

#### Coding:

BER-TLV:	81	03	01	23	03	82	02	82	81	83	01	00
	8D	81	8D	08	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19

# 27.22.4.3.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.2.

# 27.22.4.3.5 GET INPUT (default text)

27.22.4.3.5.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.3.5.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

#### 27.22.4.3.5.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.5.4 Method of test

27.22.4.3.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.3.5.4.2 Procedure

# Expected Sequence 5.1(GET INPUT, default text for the input, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 5.1.1	text, packing not required, no help
			information available]
4	$ME \rightarrow USER$	Display "Enter 12345"	Range of expected length is 5-5
		Display "12345"	Text string coding in unpacked format
			Default text coding in unpacked format
5	$USER \to ME$	Completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 5.1.1	

# PROACTIVE COMMAND: GET INPUT 5.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data Text: "Enter 12345"

Response length

Minimum length: 5 Maximum length: 5

Default Text

Data coding scheme: unpacked, 8 bit data

Text: "12345"

## Coding:

BER-TLV:	D0	23	81	03	01	23	00	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	31	32	33	34
	35	91	02	05	05	17	06	04	31	32	33	34
	35											

#### TERMINAL RESPONSE: GET INPUT 5.1.1

# Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	06	04	31	32	33	34	35				

# Expected Sequence 5.2 (GET INPUT, default text for the input with max length, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 5.2.1	text, packing not required, no help
			information available]
4	$ME \rightarrow USER$	Display "Enter:"	Range of expected length is 160-160
		Display default text input:	Text string coding in unpacked format
		"***111111111###***22222222	Default text length 160 bytes coding in
		22###***33333333###***4444	unpacked format
		444444###***555555555###***	
		6666666666###***777777777	
		##***888888888###***9999999	
		999###***000000000###"	
5	$USER \to ME$		
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed successfully]
		INPUT 5.2.1	

#### PROACTIVE COMMAND: GET INPUT 5.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "Enter:"

Response length

Minimum length: 160 Maximum length: 160

Default Text

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*222222222###\*\*\*33333333###\*\*\*44444444###\*\*\*

99999###\*\*\*000000000###"

BER-TLV:	D0	81	BA	81	03	01	23	00	82	02	81	82
	8D	07	04	45	6E	74	65	72	3A	91	02	A0
	A0	17	81	A1	04	2A	2A	2A	31	31	31	31
	31	31	31	31	31	31	23	23	23	2A	2A	2A
	32	32	32	32	32	32	32	32	32	32	23	23
	23	2A	2A	2A	33	33	33	33	33	33	33	33
	33	33	23	23	23	2A	2A	2A	34	34	34	34
	34	34	34	34	34	34	23	23	23	2A	2A	2A
	35	35	35	35	35	35	35	35	35	35	23	23
	23	2A	2A	2A	36	36	36	36	36	36	36	36
	36	36	23	23	23	2A	2A	2A	37	37	37	37
	37	37	37	37	37	37	23	23	23	2A	2A	2A
	38	38	38	38	38	38	38	38	38	38	23	23
	23	2A	2A	2A	39	39	39	39	39	39	39	39
	39	39	23	23	23	2A	2A	2A	30	30	30	30
	30	30	30	30	30	30	23	23	23			

TERMINAL RESPONSE: GET INPUT 5.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: unpacked, 8 bit data

Text: "\*\*\*111111111###\*\*\*22222222###\*\*\*333333333###\*\*\*444444444###\*\*\*

99999###\*\*\*000000000###"

#### Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	81	A1	04	2A	2A	2A	31	31	31	31	31
	31	31	31	31	31	23	23	23	2A	2A	2A	32
	32	32	32	32	32	32	32	32	32	23	23	23
	2A	2A	2A	33	33	33	33	33	33	33	33	33
	33	23	23	23	2A	2A	2A	34	34	34	34	34
	34	34	34	34	34	23	23	23	2A	2A	2A	35
	35	35	35	35	35	35	35	35	35	23	23	23
	2A	2A	2A	36	36	36	36	36	36	36	36	36
	36	23	23	23	2A	2A	2A	37	37	37	37	37
	37	37	37	37	37	23	23	23	2A	2A	2A	38
	38	38	38	38	38	38	38	38	38	23	23	23
	2A	2A	2A	39	39	39	39	39	39	39	39	39
	39	23	23	23	2A	2A	2A	30	30	30	30	30
	30	30	30	30	30	23	23	23				

# 27.22.4.3.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1 to 5.2.

# 27.22.4.3.6 GET INPUT (display of Icon)

### 27.22.4.3.6.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.3.6.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.5.4, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3, clause 12.13 and clause 12.31.

### 27.22.4.3.6.3 Test purpose

To verify that the ME displays the Icon contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

#### 27.22.4.3.6.4 Method of test

#### 27.22.4.3.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.3.6.4.2 Procedure

#### Expected Sequence 6.1A (GET INPUT, Basic icon, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON self-explanatory for the Text
		INPUT 6.1.1	string]
4	$ME \to USER$	Display the BASIC-ICON for the	
		prompt	
			Text string coding in unpacked format
5	$USER \to ME$	Enter "+" and completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	Command performed successfully]
		INPUT 6.1.1A	

# PROACTIVE COMMAND: GET INPUT 6.1.1

### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data

Text: "<NO-ICON>"

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 1 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	1D	81	03	01	23	00	82	02	81	82	8D
-	0A	04	3C	4E	4F	2D	49	43	4F	4E	3E	91
	02	00	0A	1E	02	00	01					

# TERMINAL RESPONSE: GET INPUT 6.1.1A

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00	
	8D	02	04	2B									

# Expected Sequence 6.1B (GET INPUT, Basic icon, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON self-explanatory for the Text
		INPUT 6.1.1	string]
4	$ME \rightarrow USER$	Display " <no-icon>" for the</no-icon>	
		prompt without the icon	
			Text string coding in unpacked format
5	$USER \to ME$	Enter "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INPUT 6.1.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INPUT 6.1.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be

displayed

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	04
•	8D	02	04	2B								

## Expected Sequence 6.2A (GET INPUT, Basic icon, non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
		INPUT 6.2.1	Text string]
4	$ME \rightarrow USER$	' '	
		Display the BASIC-ICON for the	
		prompt	
			Text string coding in unpacked format
_			
5	$ USER \to ME$	Enter the input "+" and	
		completion	10
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
		INPUT 6.2.1A	

#### PROACTIVE COMMAND: GET INPUT 6.2.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: unpacked, 8 bit data
Text: "<BASIC-ICON>"

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory

Icon identifier: 1 (number of record in  $EF_{Img}$ )

BER-TLV:	D0	20	81	03	01	23	00	82	02	81	82	8D
	0D	04	3C	42	41	53	49	43	2D	49	43	4F
	4E	3E	91	02	00	0A	1E	02	01	01		

TERMINAL RESPONSE: GET INPUT 6.2.1A

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.2B (GET INPUT, Basic icon, non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[BASIC-ICON non self-explanatory for the
		INPUT 6.2.1	Text string]
4	$ME \rightarrow USER$	Display " <basic-icon>" for the</basic-icon>	
		prompt without the icon	
			Text string coding in unpacked format
			The same of the sa
5	$USER \to ME$	Enter the input "+" and	
		completion	
6	$ME \to SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
		INPUT 6.2.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INPUT 6.2.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	04
	8D	02	04	2B								

# Expected Sequence 6.3A (GET INPUT, Colour icon, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	NAT 0184	PENDING: GET INPUT 6.3.1	
2	···- / O····	FETCH	
3	$SIM \rightarrow ME$		[COLOUR-ICON self-explanatory for the Text
		INPUT 6.3.1	string]
4	$ME \rightarrow USER$	Display the COLOUR-ICON for	
		the prompt	
			Text string coding in unpacked format
5		Enter the input "+" and	
		completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully]
		INPUT 6.3.1A	

#### PROACTIVE COMMAND: GET INPUT 6.3.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data Text: "<NO-ICON>"

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: self-explanatory

Icon identifier: 2 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	1D	81	03	01	23	00	82	02	81	82	8D
_	0A	04	3C	4E	4F	2D	49	43	4F	4E	3E	91
	02	00	0A	1E	02	00	02					

# TERMINAL RESPONSE: GET INPUT 6.3.1A

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.3B (GET INPUT, Colour icon, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 6.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON self-explanatory for the Text
		INPUT 6.3.1	string]
4	$ME \rightarrow USER$	Display the COLOUR-ICON for	
		the prompt	
			Text string coding in unpacked format
5	LICED . ME	Enter the input ", " and	
3	USER → IVIE	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[Command performed successfully, but
0	IVIL -> SIIVI	INPUT 6.3.1B	requested icon could not be displayed]
			logicolog logit codia flot be displayed

TERMINAL RESPONSE: GET INPUT 6.3.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	04
	8D	02	04	2B								

# Expected Sequence 6.4A (GET INPUT, Colour icon, non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: GET INPUT 6.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET INPUT 6.4.1	[COLOUR-ICON non self-explanatory for the Text string]
4	ME → USER	Display " <colour-icon>" and Display the COLOUR-ICON for the prompt</colour-icon>	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET INPUT 6.4.1A	[Command performed successfully]

#### PROACTIVE COMMAND: GET INPUT 6.4.1

#### Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "<COLOUR-ICON>"

Response length

Minimum length: 0 Maximum length: 10

Icon Identifier

Icon qualifier: not self-explanatory

Icon identifier: 2 (number of record in  $EF_{Img}$ )

Coding:

BER-TLV:	D0	21	81	03	01	23	00	82	02	81	82	8D
	0E	04	3C	43	4F	4C	4F	55	52	2D	49	43
	4F	4E	3E	91	02	00	0A	1E	02	01	02	

#### TERMINAL RESPONSE: GET INPUT 6.4.1A

# Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	00
	8D	02	04	2B								

# Expected Sequence 6.4B (GET INPUT, Colour icon, non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
2	NAE CINA	PENDING: GET INPUT 6.4.1	
_	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	[COLOUR-ICON non self-explanatory for the
4	ME LICED	INPUT 6.4.1 Display " <colour-icon>" for</colour-icon>	Text string]
4	IVIE → USER	the prompt without the icon	
		line prompt without the icon	
			Text string coding in unpacked format
5	$USER \to ME$	Enter the input "+" and	
_		completion	
6	$ME \rightarrow SIM$		[Command performed successfully, but
		INPUT 6.4.1B	requested icon could not be displayed]

TERMINAL RESPONSE: GET INPUT 6.4.1B

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, no help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be

displayed

Text string

Data coding scheme: unpacked, 8 bit data

Text: "+"

Coding:

BER-TLV:	81	03	01	23	00	82	02	82	81	83	01	04
	8D	02	04	2B								

# 27.22.4.3.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 6.1A to 6.4B.

# 27.22.4.3.7 GET INPUT (Help Information)

27.22.4.3.7.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.3.7.2 Conformance requirement

The ME shall support the GET INPUT command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.3, clause 6.6.3, clause 6.8, clause 6.11, clause 12.6, clause 12.15, clause 12.15.1, clause 12.15.2, clause 12.15.3 and clause 12.13.

#### 27.22.4.3.7.3 Test purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns a 'help information required by the user' result value in the TERMINAL RESPONSE command sent to the SIM if the user has indicated the need to get help information.

27.22.4.3.7.4 Method of test

27.22.4.3.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.3.7.4.2 Procedure

# Expected Sequence 7.1 (GET INPUT, digits only, ME to echo text, ME supporting 8 bit data Message, help information available)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: GET INPUT 7.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: GET	[digits only, SMS default alphabet, ME to echo
		INPUT 7.1.1	text, packing not required, help information
			available]
4	$ME \rightarrow USER$	Display "Enter 12345"	Range of expected length is 5-5
			Text string coding in unpacked format
5	$USER \to ME$	Press "help"	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET	[command performed, help information
		INPUT 7.1.1	required by user]

#### PROACTIVE COMMAND: GET INPUT 7.1.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, help information available

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Enter 12345"

Response length

Minimum length: 5 Maximum length: 5

BER-TLV:	D0	1B	81	03	01	23	80	82	02	81	82	8D
	0C	04	45	6E	74	65	72	20	31	32	33	34
	35	91	02	05	05							

**TERMINAL RESPONSE: GET INPUT 7.1.1** 

Logically:

Command details

Command number:

Command type: GET INPUT

1

Command qualifier: digits (0-9, \*, # and +) only, SMS default alphabet, input in unpacked format, ME to

echo text, help information available

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Help information required by the user

Coding:

BER-TLV: 81 03 01	23 80 82	02 82 81	83 01	13
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#### 27.22.4.3.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

#### 27.22.4.4 MORE TIME

# 27.22.4.4.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.4.2 Conformance requirement

The ME shall support the MORE TIME command as defined in:

• 3GPP TS 11.14 [15] clause 6.4.4, clause 6.6.4, clause 5.2, clause 12.6 and clause 12.7.

# 27.22.4.4.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the MORE TIME proactive SIM command.

# 27.22.4.4.4 Method of test

#### 27.22.4.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.4.4.2 Procedure

# **Expected Sequence 1.1 (MORE TIME)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: MORE TIME 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: MORE	
		TIME 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: MORE	[Command performed successfully]
		TIME 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: MORE TIME 1.1.1

Logically:

Command details

Command number:

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	02	00	82	02	81	82

TERMINAL RESPONSE: MORE TIME 1.1.1

Logically:

Command details

Command number:

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	02	00	82	02	82	81	83	01	00
DEIX-IEV.	01	03	01	02	00	02	02	02	01	03	01	00

# 27.22.4.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

# 27.22.4.5 PLAY TONE

# 27.22.4.5.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.5.2 Conformance requirement

The ME shall support the PLAY TONE command as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.5, clause 6.6.5, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.16 and clause 12.8.

# 27.22.4.5.3 Test purpose

To verify that the ME plays an audio tone of a type and duration contained in the PLAY TONE proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME plays the requested audio tone through the external ringer whilst not in call and shall superimpose the tone on top of the downlink audio whilst in call.

To verify that the ME displays the text contained in the PLAY TONE proactive SIM command.

#### 27.22.4.5.4 Method of test

#### 27.22.4.5.4.1 Initial conditions

The ME is connected to the SIM Simulator and to the System Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.5.4.2 Procedure

# **Expected Sequence 1.1 (PLAY TONE)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: PLAY	
		TONE 1.1.1	
4	$ME \rightarrow USER$	Display "Dial Tone"	
		Play a standard supervisory dial	
		tone through the external ringer for	
		a duration of 5 s	
5	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
		TONE 1.1.1	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
_	0114 145	ENDED	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.2	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY	
	OIIVI 7 IVIL	TONE 1.1.2	
10	$ME \to USER$	Display "Sub. Busy"	
		Play a standard supervisory called	
		subscriber busy tone for a duration	
		of 5 s	
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
14	JIIVI → IVIE	ENDED	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	OIIVI / IVIL	PENDING: PLAY TONE 1.1.3	

Step	Direction	MESSAGE / Action	Comments
14	$ME \rightarrow SIM$	FETCH	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.3	
16	$ME \to USER$	Display "Congestion"	
		Play a standard supervisory congestion tone for a duration of 5 s	
17	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
18	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
19	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.4	
20 21	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	FETCH PROACTIVE COMMAND: PLAY	
22	$ME \rightarrow USER$	TONE 1.1.4 Display "RP Ack"	
		Play a standard supervisory radio	
23	ME  o SIM	path acknowledgement tone TERMINAL RESPONSE: PLAY	[Command performed successfully]
24	SIM → ME	TONE 1.1.4 PROACTIVE SIM SESSION	
25	$SIM \rightarrow ME$	ENDED PROACTIVE COMMAND	
26	ME  o SIM	PENDING: PLAY TONE 1.1.5 FETCH	
27	SIM → ME	PROACTIVE COMMAND: PLAY	
28	$ME \to USER$	Display "No RP"	
		Play a standard supervisory radio path not available / call dropped	
29	ME  o SIM	tone for a duration of 5 s TERMINAL RESPONSE: PLAY	[Command performed successfully]
30	$SIM \rightarrow ME$	TONE 1.1.5 PROACTIVE SIM SESSION	
31	$SIM \rightarrow ME$	ENDED PROACTIVE COMMAND	
22	NAT CUNA	PENDING: PLAY TONE 1.1.6	
32 33	$\begin{array}{c} ME \to SIM \\ SIM \to ME \end{array}$	PROACTIVE COMMAND: PLAY	
34	$ME \to USER$	TONE 1.1.6 Display "Spec Info"	
		Play a standard supervisory error / special information tone for a duration of 5 s	
35	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
36	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
37	$SIM \to ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.7	
38	$ME \rightarrow SIM$	FETCH	
39	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.7	
40	$ME \rightarrow USER$	Display "Call Wait"	
		Play a standard supervisory call waiting tone for a duration of 5 s	
41	$ME \to SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
42	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
		1	1

Step	Direction	MESSAGE / Action	Comments
43	$SIM \rightarrow ME$	PROACTIVE COMMAND	Comments
		PENDING: PLAY TONE 1.1.8	
44	$ME \rightarrow SIM$	FETCH	
45	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.8	
46	$ME \rightarrow USER$	Display "Ring Tone"	
	WE 7 COLIC		
		Play a standard supervisory	
47	NAT CINA	ringing tone for duration of 5 s	[Command performed accessfully]
47	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY TONE 1.1.8	[Command performed successfully]
48	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
49	$USER \to ME$	Set up a voice call	[ User dials 123456789 to connect to the
50	ME → Network	Establish voice call	network manually] [Voice call is established]
51	SIM → ME	PROACTIVE COMMAND	
	· · · · · · · · · · · · · · · · · · ·	PENDING: PLAY TONE 1.1.9	
52	$ME \rightarrow SIM$	FETCH	
53	$SIM \to ME$	PROACTIVE COMMAND: PLAY TONE 1.1.9	
54	$ME \rightarrow USER$	Display "Dial Tone"	
	WIL / GOLIK		
		Superimpose the standard	
		supervisory dial tone on the audio downlink for the duration of 5 s	
55	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
	IVIL — SIIVI	TONE 1.1.9	[Seminaria perferince successiony]
56	$SIM \to ME$	PROACTIVE SIM SESSION	
57	$USER \to ME$	ENDED The user ends the call	
58	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	• / <u>=</u>	PENDING: PLAY TONE 1.1.10	
59	$ME \to SIM$	FETCH	
60	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.10	
61	$ME \to USER$	Display "This command instructs	
	WE 7 COLIC	the ME to play an audio tone.	
		Upon receiving this command, the	
		ME shall check if it is currently in, or in the process of setting up	
		(SET-UP message sent to the	
		network, see GSM"04.08"(8)), a	
		speech call If the ME I"	
		Play a general boop	
62	ME  o SIM	Play a general beep TERMINAL RESPONSE: PLAY	[Command performed successfully]
-	/ 51101	TONE 1.1.10a	
		or	or
		TERMINAL RESPONSE: PLAY	[Command beyond ME's capabilities]
63	$SIM \to ME$	PROACTIVE SIM SESSION	
	CIIVI / IVIL	ENDED	
64	$SIM \to ME$	PROACTIVE COMMAND	
GE.	ME CIM	PENDING: PLAY TONE 1.1.11 FETCH	
65 66	ME  o SIM $SIM  o ME$	PROACTIVE COMMAND: PLAY	
	Olivi — IVIE	TONE 1.1.11	
67	$ME \to USER$	Display "Beep"	
		Play a ME proprietory general	
		Play a ME proprietary general beep	
68	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
	-	TONE 1.1.11a	
		Or TERMINAL DESDONSE: DLAV	or
		TERMINAL RESPONSE: PLAY TONE 1.1.11b	[Command beyond ME's capabilities]
		I OUR IIII	L

Step	Direction	MESSAGE / Action	Comments
69	$SIM \to ME$	PROACTIVE SIM SESSION	
70	SIM  o ME	PROACTIVE COMMAND	
/ 0	SIIVI → IVIE	PENDING: PLAY TONE 1.1.12	
71	$ME \to SIM$	FETCH	
72	$SIM \to ME$	PROACTIVE COMMAND: PLAY	
73	ME  o USER	TONE 1.1.12 Display "Positive"	
"	IVIL -> OOLIK	Biopiay 1 conivo	
		Play a ME proprietary positive	
74	ME  o SIM	acknowledgement tone TERMINAL RESPONSE: PLAY	[Command performed successfully]
	IVIL -> OIIVI	TONE 1.1.12a	[command ponomica adocedarany]
		or	or
		TERMINAL RESPONSE: PLAY TONE 1.1.12b	[Command beyond ME's capabilities]
75	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
76	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.13	
77	$ME \rightarrow SIM$	FETCH	
78	$SIM \to ME$	PROACTIVE COMMAND: PLAY	
79	ME  o USER	TONE 1.1.13 Display "Negative"	
79	IVIE → USER	Display Negative	
		Play a ME proprietary negative	
80	$ME \rightarrow SIM$	acknowledgement tone TERMINAL RESPONSE: PLAY	[Command performed successfully]
	IVIL -> SIIVI	TONE 1.1.13a	[command performed successibility]
		or	or
		TERMINAL RESPONSE: PLAY TONE 1.1.13b	[Command beyond ME's capabilities]
81	$SIM \to ME$	PROACTIVE SIM SESSION	
00		ENDED	
82	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: PLAY TONE 1.1.14	
83	$ME \to SIM$	FETCH	
84	$SIM \to ME$	PROACTIVE COMMAND: PLAY	
85	ME  o USER	TONE 1.1.14 Display "Quick"	
00	WIE 7 OOEIK	Biopiay Quien	
		Play a ME proprietary general	
86	$ME \rightarrow SIM$	beep TERMINAL RESPONSE: PLAY	[Command performed successfully]
	WIE 7 OIW	TONE 1.1.14a	[Command ponomica cacceciany]
		or TERMINAL RESPONSE: PLAY	or [Command beyond ME's capabilities]
		TONE 1.1.14b	[Command beyond ME's capabilities]
87	$SIM \to ME$	PROACTIVE SIM SESSION	
88	SIM  o ME	PROACTIVE COMMAND	
00	Olivi → IVIE	PENDING: PLAY TONE 1.1.15	
89	$ME \rightarrow SIM$	FETCH	
90	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY TONE 1.1.15	
91	$ME \to USER$	Display " <abort>"</abort>	
		Play an ME Error / Special information tone until user aborts	
		this command (the command shall	
		be aborted by the user within 1	
92	$ME \to SIM$	minute) TERMINAL RESPONSE: PLAY	[Proactive SIM session terminated by the
		TONE 1.1.15	user]
93	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
I		IEINDED	I

Step	Direction	MESSAGE / Action	Comments
94	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.1.16	
95	$ME \to SIM$	FETCH	
96	$SIM \to ME$	PROACTIVE COMMAND: PLAY TONE 1.1.16	[No alpha identifier, no tone tag, no duration tag]
97	$ME \to User$	ME plays general beep, or if not	[ME uses default duration defined by
		supported any (defined by ME- manufacturer) other supported tone	ME-manufacturer]
98	ME  o SIM	TERMINAL RESPONSE: PLAY TONE 1.1.16	[Command performed successfully], [ME uses general beep, or if not supported any (defined by ME-manufacturer) other supported tone, uses default duration defined by ME-manufacturer]
99	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	-

# PROACTIVE COMMAND: PLAY TONE 1.1.1

# Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Dial Tone"

Tone: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

# Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	44	69	61	6C	20	54	6F	6E	65	8E	01
	01	84	02	01	05							

# PROACTIVE COMMAND: PLAY TONE 1.1.2

# Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "Sub. Busy"

Tone: Standard supervisory tones: called subscriber busy

Duration

Time unit: Seconds
Time interval: 5

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	53	75	62	2E	20	42	75	73	79	8E	01
	02	84	02	01	05							

PROACTIVE COMMAND: PLAY TONE 1.1.3

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Congestion"

Tone: Standard supervisory tones: congestion

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	1C	81	03	01	20	00	82	02	81	03	85	
	0A	43	6F	6E	67	65	73	74	69	6F	6E	8E	
	01	03	84	02	01	05							1

PROACTIVE COMMAND: PLAY TONE 1.1.4

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "RP Ack"

Tone: Standard supervisory tones: radio path acknowledge

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	18	81	03	01	20	00	82	02	81	03	85
·	06	52	50	20	41	63	6B	8E	01	04	84	02
	01	05										

PROACTIVE COMMAND: PLAY TONE 1.1.5

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece Alpha identifier: "No RP"

Tone: Standard supervisory tones: radio path not available

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	17	81	03	01	20	00	82	02	81	03	85
	05	4E	6F	20	52	50	8E	01	05	84	02	01
	05											

# PROACTIVE COMMAND: PLAY TONE 1.1.6

Logically:

Command details

Command number:

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "Spec Info"

Tone: Standard supervisory tones: Error/ special information

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	53	70	65	63	20	49	6E	66	6F	8E	01
	06	84	02	01	05							

# PROACTIVE COMMAND: PLAY TONE 1.1.7

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "Call Wait"

Tone: Standard supervisory tones: call waiting tone

Duration

Time unit: Seconds
Time interval: 5

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	43	61	6C	6C	20	57	61	69	74	8E	01
	07	84	02	01	05							

#### PROACTIVE COMMAND: PLAY TONE 1.1.8

#### Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Ring Tone"

Tone: Standard supervisory tones: ringing tone

Duration

Time unit: Seconds
Time interval: 5

#### Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	52	69	6E	67	20	54	6F	6E	65	8E	01
	80	84	02	01	05							

#### PROACTIVE COMMAND: PLAY TONE 1.1.9

#### Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Earpiece

Alpha identifier: "Dial Tone"

Tone: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

#### Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
_	09	44	69	61	6C	20	54	6F	6E	65	8E	01
	01	84	02	01	05							

#### PROACTIVE COMMAND: PLAY TONE 1.1.10

# Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece

Alpha identifier: "This command instructs the ME to play an audio tone. Upon receiving this

command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the

ME I"

BER-TLV:	D0	81	FD	81	03	01	20	00	82	02	81	03
DER-ILV.										_		
	85	81	F1	54	68	69	73	20	63	6F	6D	6D
	61	6E	64	20	69	6E	73	74	72	75	63	74
	73	20	74	68	65	20	4D	45	20	74	6F	20
	70	6C	61	79	20	61	6E	20	61	75	64	69
	6F	20	74	6F	6E	65	2E	20	55	70	6F	6E
	20	72	65	63	65	69	76	69	6E	67	20	74
	68	69	73	20	63	6F	6D	6D	61	6E	64	2C
	20	74	68	65	20	4D	45	20	73	68	61	6C
	6C	20	63	68	65	63	6B	20	69	66	20	69
	74	20	69	73	20	63	75	72	72	65	6E	74
	6C	79	20	69	6E	2C	20	6F	72	20	69	6E
	20	74	68	65	20	70	72	6F	63	65	73	73
	20	6F	66	20	73	65	74	74	69	6E	67	20
	75	70	20	28	53	45	54	2D	55	50	20	6D
	65	73	73	61	67	65	20	73	65	6E	74	20
	74	6F	20	74	68	65	20	6E	65	74	77	6F
	72	6B	2C	20	73	65	65	20	47	53	4D	22
	30	34	2E	30	38	22	28	38	29	29	2C	20
	61	20	73	70	65	65	63	68	20	63	61	6C
	6C	2E	20	2D	20	49	66	20	74	68	65	20
	4D	45	20	49								

#### PROACTIVE COMMAND: PLAY TONE 1.1.11

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Beep"

Tone: ME proprietary tones: general beep

Duration

Time unit: Seconds
Time interval: 1

Coding:

BER-TLV:	D0	16	81	03	01	20	00	82	02	81	03	85
	04	42	65	65	70	8E	01	10	84	02	01	01

# PROACTIVE COMMAND: PLAY TONE 1.1.12

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Positive"

Tone: ME proprietary tones: positive acknowledgement tone

Duration

Time unit: Seconds
Time interval: 1

Coding:

BER-TLV:	D0	1A	81	03	01	20	00	82	02	81	03	85
	80	50	6F	73	69	74	69	76	65	8E	01	11
	84	02	01	01							_	

# PROACTIVE COMMAND: PLAY TONE 1.1.13

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Negative"

Tone: ME proprietary tones: negative acknowledgement tone

Duration

Time unit: Seconds
Time interval: 1

Coding:

BI	ER-TLV:	D0	1A	81	03	01	20	00	82	02	81	03	85	
		80	4E	65	67	61	74	69	76	65	8E	01	12	
		84	02	01	01									

# PROACTIVE COMMAND: PLAY TONE 1.1.14

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Quick"

Tone: ME proprietary tones: general beep

Duration

Time unit: Tenths of seconds

Time interval: 2

BER-TLV:	D0	17	81	03	01	20	00	82	02	81	03	85
•	05	51	75	69	63	6B	8E	01	10	84	02	02
	02											

PROACTIVE COMMAND: PLAY TONE 1.1.15

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "<ABORT>"

Tone: Standard supervisory tones: Error / Special information

Duration

Time unit: Minutes
Time interval: 1

Coding:

BER-TLV:	D0	19	81	03	01	20	00	82	02	81	03	85
_	07	3C	41	42	4F	52	54	3E	8E	01	06	84
	02	00	01									

PROACTIVE COMMAND: PLAY TONE 1.1.16

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece

Coding:

BER-TLV:	D0	09	81	03	01	20	00	82	02	81	03	

TERMINAL RESPONSE: PLAY TONE 1.1.1 ... 1.1.9, 1.1.16

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

							00					
BER-TLV:	l 81	03	01	20	00	82	02	82	l 81	l 83	l 01	00

TERMINAL RESPONSE: PLAY TONE 1.1.10a ... 1.1.14a

Logically:

Command details

Command number:

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 00

TERMINAL RESPONSE: PLAY TONE 1.1.10b ..1.1.14b

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command beyond ME's capabilities

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 30

**TERMINAL RESPONSE: PLAY TONE 1.1.15** 

Logically:

Command details

Command number:

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Proactive SIM session terminated by user

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 10

27.22.4.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

#### 27.22.4.6 **POLL INTERVAL**

#### 27.22.4.6.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.6.2 Conformance requirement

The ME shall support the POLL INTERVAL command as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.6, clause 6.6.6, clause 5.2, clause 12.6, clause 12.7 and clause 12.8.

#### 27.22.4.6.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the POLL INTERVAL proactive SIM command.

To verify that the ME gives a valid response to the polling interval requested by the SIM.

To verify that the ME sends STATUS commands to the SIM at an interval no longer than the interval negotiated by the SIM.

#### 27.22.4.6.4 Method of test

#### 27.22.4.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.6.4.2 Procedure

## **Expected Sequence 1.1 (POLL INTERVAL, Seconds)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POLL INTERVAL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POLL	[Duration: 20 seconds]
		INTERVAL 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POLL	[Command performed successfully, duration
		INTERVAL 1.1.1	depends on the ME's capabilities]
5	$ME \rightarrow SIM$	ME polls in intervals as stated in	
		the duration TLV of TERMINAL	
		RESPONSE: POLL INTERVAL	
		1.1.1	

# PROACTIVE COMMAND: POLL INTERVAL 1.1.1

#### Logically:

Command details

Command number:

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

SIM Source device: Destination device: ME

Duration

Time unit: Seconds Time interval:

BER-TLV:	D0	0D	81	03	01	03	00	82	02	81	82	84
	02	01	14									

TERMINAL RESPONSE: POLL INTERVAL 1.1.1

Logically:

Command details

Command number:

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Seconds
Time interval: 20

#### Coding:

BER-TLV:	81	03	01	03	00	82	02	82	81	83	01	00
	84	02	01	14								

NOTE: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as stated in 3GPP TS 11.14 [13], subclause 6.4.6.

# 27.22.4.6.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

#### 27.22.4.7 REFRESH

# 27.22.4.7.1 REFRESH (normal)

#### 27.22.4.7.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.7.1.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.7, clause 6.6.13, clause 5.2, clause 12.6, clause 12.7 and clause 12.18.

#### 27.22.4.7.1.3 Test purpose

To verify that the ME performs the SIM initialization and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

#### 27.22.4.7.1.4 Method of test

#### 27.22.4.7.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the execution of expected sequence 1.2 the FDN service shall be enabled.

#### 27.22.4.7.1.4.2 Procedure

# **Expected Sequence 1.1 (REFRESH, SIM Initialization)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: REFRESH 1.1.1	
4	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
5	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: REFRESH 1.1.1A Or	
		TERMINAL RESPONSE:	[additional EFs read]
7	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
8	$USER \to ME$	Call setup to "321"	
9	$ME \rightarrow USER$	Call set up not allowed	
10	$USER \to ME$	Call setup to "123"	
11	$ME \rightarrow SS$	Setup	Called party BCD number shall be "123"

# PROACTIVE COMMAND: REFRESH 1.1.1

# Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	03	82	02	81	82	

### TERMINAL RESPONSE: REFRESH 1.1.1A

# Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 00

TERMINAL RESPONSE: REFRESH 1.1.1B

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 03

# **Expected Sequence 1.2 (REFRESH, File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.2.1	
4	SIM	Update EF FDN RECORD 1	[EF FDN record 1 updated to contain the
			dialling string "0123456789"]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[normal ending]
		REFRESH 1.2.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 1.2.1B	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
7	LIGER ME	ENDED	
7		Call setup to "123"	
8		Call set up not allowed	
9	$USER \to ME$	Call setup to "0123456789"	
10	$ME \rightarrow SS$	Setup	Called party BCD number shall be
			"0123456789"

PROACTIVE COMMAND: REFRESH 1.2.1

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: SIM
Destination device: ME
File List: EF FDN

BER-TLV:	D0	12	81	03	01	01	01	82	02	81	82	92
	07	01	3F	00	7F	10	6F	3B				

TERMINAL RESPONSE: REFRESH 1.2.1A

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TL'	/: 81	03	01	01	01	82	02	82	81	83	01	00	l
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TERMINAL RESPONSE: REFRESH 1.2.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: File Change Notification

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

BER-TLV:	81	03	01	01	01	82	02	82	l 81	83	01	03

## **Expected Sequence 1.3 (REFRESH, SIM Initialization and File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: REFRESH 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: REFRESH 1.3.1	
4	SIM	Update EF PLMN	[EF PLMN to contain the PLMN code "98798" as the first PLMN code]
5	$ME \rightarrow SIM$	READ BINARY: EF PLMN	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: REFRESH 1.3.1A Or	[normal ending]
7	$SIM \to ME$	TERMINAL RESPONSE: REFRESH 1.3.1B PROACTIVE SIM SESSION ENDED	[additional EFs read]

PROACTIVE COMMAND: REFRESH 1.3.1

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: SIM
Destination device: ME
File List: EF PLMN

Coding:

BER-TLV:	D0	12	81	03	01	01	02	82	02	81	82	92	
	07	01	3F	00	7F	20	6F	30					

TERMINAL RESPONSE: REFRESH 1.3.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 01 02 82 02 82 81 83 01 00

TERMINAL RESPONSE: REFRESH 1.3.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV	81	03	01	01	02	82	02	82	81	83	01	03	1
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## **Expected Sequence 1.4 (REFRESH, SIM Initialization and Full File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: REFRESH 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: REFRESH 1.4.1	
4	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
5	SIM	Update EF FDN	[EF FDN record 1 updated to contain the dialling string "0123456789"]
6	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization]
7	$ME \to SIM$	TERMINAL RESPONSE: REFRESH 1.4.1A Or TERMINAL RESPONSE:	[additional EEs road]
		REFRESH 1.4.1B	[additional EFs read]
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
9	$USER \to ME$	Call setup to "321"	
10	$ME \rightarrow USER$	Call set up not allowed	
11	$USER \to ME$	Call setup to "0123456789"	
12	$ME \rightarrow SS$	Setup	Called party BCD number shall be "0123456789"

#### PROACTIVE COMMAND: REFRESH 1.4.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	00	82	02	81	82	
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TERMINAL RESPONSE: REFRESH 1.4.1A

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	00	l
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#### TERMINAL RESPONSE: REFRESH 1.4.1B

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	03
D		00			00		~_				<b>.</b>	

## **Expected Sequence 1.5 (REFRESH, SIM Reset)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 1.5.1	
4	$ME \rightarrow SIM$	GSM Termination Procedure	
5	$ME \rightarrow SIM$	GSM Activation Procedure	
6	$ME \rightarrow SIM$	SIM Initialization	
7	$ME \rightarrow SIM$		[NO TERMINAL RESPONSE]

#### PROACTIVE COMMAND: REFRESH 1.5.1

Logically:

Command details

Command number: 1

Command type: REFRESH Command qualifier: SIM Reset

Device identities

Source device: SIM
Destination device: ME

## Expected Sequence 1.6 (REFRESH, SIM Initialization after SMS-PP data download)

Step	Direction	MESSAGE / Action	Comments
1	ME	The ME shall be in its normal idle mode	[Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00']
2	$SS \to ME$	SMS-PP Data Download Message 1.6.1	
3	$ME \to USER$	The ME shall not display the message or alert the user of a short message waiting	
4	$ME \to SIM$	ENVELOPE: SMS-PP DOWNLOAD 1.6.1	
5	$SIM \to ME$	PROACTIVE COMMAND PENDING: REFRESH 1.1.1	
6	$ME \to SS$	RP-ACK	
7	$ME \to SIM$	FETCH	
8	$SIM \to ME$	PROACTIVE COMMAND: REFRESH 1.1.1	
9	SIM	Invalidate EF IMSI, EF LOCI and EF ADN	[Restricted dialling feature is enabled]
10	$ME \to SIM$	SIM Initialization	[ME performs SIM initialization]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: REFRESH 1.1.1A Or	
		TERMINAL RESPONSE:	[additional EFs read]
12	$SIM \to ME$	REFRESH 1.1.1B PROACTIVE SIM SESSION ENDED	
13	$USER \to ME$	Call setup to "321"	
14	$ME \to USER$	Call set up not allowed	
15	$USER \to ME$	Call setup to "123"	
16	$ME \to SS$	Setup	Called party BCD number shall be "123"

## SMS-PP (Data Download) Message 1.6.1

#### Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet Default Alphabet TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

BER-TLV	04	03	91	21	43	7F	12	89	10	10	00	00
	00	00	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

#### **ENVELOPE: SMS-PP DOWNLOAD 1.6.1**

Logically:

SMS-PP Download

Device identities

Source device: Network
Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

**SMS TPDU** 

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group
Compression
Message Class
General Data Coding
Text is uncompressed
Class 2 SIM Specific Message

Alphabet Default Alphabet TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

#### Coding:

BER-TLV:	D1	2C	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1B	04	04	91	21	43
	7F	12	89	10	10	00	00	00	00	0D	53	F4
	5B	4E	07	35	CB	F3	79	F8	5C	06		

## 27.22.4.7.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

## 27.22.4.7.2 REFRESH (IMSI changing procedure)

#### 27.22.4.7.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.7.2.2 Conformance requirement

The ME shall support the REFRESH command as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.7, clause 6.6.13, clause 5.2, clause 12.6, clause 12.7 and clause 12.18.

Additionally the ME shall support the SIM Initialization procedure as defined in:

• 3GPP TS 11.11 [13] clause 12.2.1.

#### 27.22.4.7.2.3 Test purpose

To verify that the ME performs the SIM initialization and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.7.2.4 Method of test

27.22.4.7.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.7.2.4.2 Procedure

## **Expected Sequence 2.1 (REFRESH, SIM Initialization and File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 2.1.1	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		REFRESH 2.1.1	
4	SIM	Update EF IMSI, EF LOCI and EF	[Update the contents of EF IMSI to
		KC	"001010123456788", EF LOCI to not updated
			and EF KC to not valid]
5	ME	Invoke MM Restart Procedure	
6	$ME \rightarrow SIM$	SIM INITIALIZATION	[ME performs SIM initialization; including
_			reading EF IMSI, EF LOCI and EF KC]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[normal]
		REFRESH 2.1.1A	
		Or	
		TERMINAL RESPONSE:	[additional EFs read]
		REFRESH 2.1.1B	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	NAT 00	ENDED	[O   IMOL -      004040404404450700   /
9	$ME \rightarrow SS$	Location updating request (type	[Send IMSI of "001010123456788" to System
		"normal location updating")	Simulator]

#### PROACTIVE COMMAND: REFRESH 2.1.1

#### Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: SIM Destination device: ME

File List

File 1: EF IMSI File 2: EF LOCI File 3: EF KC

BER-TLV:	D0	1E	81	03	01	01	02	82	02	81	82	92
	13	03	3F	00	7F	20	6F	07	3F	00	7F	20
	6F	7E	3F	00	7F	20	6F	20				

TERMINAL RESPONSE: REFRESH 2.1.1A

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

1

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 01 02 82 02 82 81 83 01 00

TERMINAL RESPONSE: REFRESH 2.1.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

BER-TLV:	81	03	01	01	02	82	02	82	81	83	01	03
----------	----	----	----	----	----	----	----	----	----	----	----	----

## **Expected Sequence 2.2 (REFRESH, SIM Initialization and Full File Change Notification)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: REFRESH 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: REFRESH 2.2.1	
4	SIM	Update EF IMSI	[Update the contents of EF IMSI to "001010123456787", -]
5	ME	Invoke MM Restart Procedure	_
6	$ME \rightarrow SIM$	SIM INITIALIZATION	[ME performs SIM initialization; including reading EF IMSI, EF LOCI and EF KC]
7	$ME \to SIM$	TERMINAL RESPONSE: REFRESH 2.2.1A Or	[normal]
		TERMINAL RESPONSE: REFRESH 2.2.1B	[additional EFs read]
8	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
9	$ME \rightarrow SS$	IMSI ATTACH	[Send IMSI of "001010123456787" to System Simulator]

PROACTIVE COMMAND: REFRESH 2.2.1

Logically:

Command details

Command number:

Command type: REFRESH

Command qualifier: SIM Initialization and Full File Change Notification

Device identities

Source device: SIM
Destination device: ME

Coding:

									00		
BER-TLV:	D0	09	81	03	01	01	00	82	02	81	82

TERMINAL RESPONSE: REFRESH 2.2.1A

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: REFRESH 2.2.1B

Logically:

Command details

Command number: 1

Command type: REFRESH

Command qualifier: SIM Initialization and File Change Notification

Device identities

Source device: ME
Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV:	81	03	01	01	00	82	02	82	81	83	01	03	1
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## **Expected Sequence 2.3 (REFRESH, SIM Reset)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		REFRESH 2.3.1	
4	SIM	Update EF IMSI	[Update the contents of EF IMSI to
			"001010123456786
5	$ME \rightarrow SIM$	GSM Termination Procedure	
6	$ME \rightarrow SIM$	GSM Activation Procedure	
7	$ME \rightarrow SIM$	SIM Initialization	[ME performs SIM initialization; including
			reading EF IMSI, EF LOCI and EF KC]
8	$ME \rightarrow SS$	IMSI ATTACH	[Send IMSI of "001010123456786" to System
			Simulator]

## PROACTIVE COMMAND: REFRESH 2.3.1

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Reset

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	01	04	82	02	81	82

27.22.4.7.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

## 27.22.4.8 SET UP MENU and ENVELOPE MENU SELECTION

## 27.22.4.8.1 SET UP MENU (normal) and ENVELOPE MENU SELECTION

27.22.4.8.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.8.1.2 Conformance requirement

The ME shall support the SET UP MENU command as defined in:

• 3GPP TS 11.14 clause 5, clause 6.4.8, clause 6.6.7, clause 6.8, clause 6.11, clause 12.6, clause 12.9 and clause 13.4.

The ME shall support MENU SELECTION as defined in:

• 3GPP TS 11.14 [15] clause 4.4, clause 5.2, clause 6.4.8, clause 6.9, clause 8, clause 12.7 and clause 12.10.

#### 27.22.4.8.1.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

#### 27.22.4.8.1.4 Method of test

#### 27.22.4.8.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

## 27.22.4.8.1.4.2 Procedure

# Expected Sequence 1.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET UP MENU 1.1.1	[First Set Up Menu]
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP MENU 1.1.1	
4	$ME \to USER$	Integrate the menu header of "Toolkit Menu" into its menu	
		system and have the menu items of "Item 1", "Item 2", "Item 3" and	
		"Item 4" under this header.	
5	$ME \to SIM$	TERMINAL RESPONSE: SET UP MENU 1.1.1	[Command Performed Successfully]
6	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	
8	$ME \to USER$	Display "Item 1", "Item 2", "Item 3", "Item 4"	
9	$USER \to ME$	Select the "Item 2" Menu entry	
	$ME \to SIM$	Send the ENVELOPE 1.1.1:	
10		MENU SELECTION (Identifier of item: 2)	
11	$SIM \to ME$	PROACTIVE COMMAND	[Second Set Up Menu, REPLACE Old Menu]
	0 / I.I.L	PENDING: SET UP MENU 1.1.2	
12	$ME \to SIM$	FETCH	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP MENU 1.1.2	
14	$ME \rightarrow USER$	Integrate the new menu header of	
	, 552.1	"Toolkit Menu" into its menu	
		system and have the menu items	
		of "One" and "Two" under this header.	
15	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
40	014 145	MENU 1.1.2	
16	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
17	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	
18	$ME \rightarrow USER$	Display "One", "Two"	
19	USER → ME	Select the "Two" menu entry	
20	$ME \to SIM$	Send the ENVELOPE 1.1.2: MENU SELECTION	
		(Identifier of item: 12)	THE LOCAL MAN DESIGNATION OF THE PROPERTY OF T
21	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP MENU 1.1.3	[Third Set Up Menu, REMOVE Toolkit Menu]
		with SW1 / SW2 of '91 0F'.	
22	$ME \to SIM$	FETCH	
23	$SIM \to ME$	PROACTIVE COMMAND SET UP	
24	$ME \rightarrow USER$	MENU 1.1.3 Remove the menu "Toolkit Menu"	
0.5		from its menu system.	(Command Borformand Co. 1113
25	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP MENU 1.1.3	[Command Performed Successfully]
26	$SIM \to ME$	PROACTIVE SIM SESSION	
0.7		ENDED	
27	$USER \to ME$	Has to unsuccessfully find the Toolkit Menu	
		I COINT WEILE	

#### PROACTIVE COMMAND: SET UP MENU 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item: 4

Text string of item: "Item 4"

#### Coding:

BER-TLV:	D0	3B	81	03	01	25	00	82	02	81	82	85
\ <u>-</u>	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	8F	07	04	49	74	65	6D	20
	34											

## PROACTIVE COMMAND: SET UP MENU 1.1.2

## Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: "11"

Text string of item: "One"

Item

Identifier of item: "12" Text string of item: "Two"

BER-TLV:	D0	23	81	03	01	25	00	82	02	81	82	85
•	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	04	11	4F	6E	65	8F	04	12	54	77
	6F											

PROACTIVE COMMAND: SET UP MENU 1.1.3

Logically:

Command details

Command number:

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME
Item: Empty

Coding:

BER-TLV:	D0	0D	81	03	01	25	00	82	02	81	82	85
·	00	8F	00									

#### TERMINAL RESPONSE: SET UP MENU 1.1.1, 1.1.2 and 1.1.3

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

DED TIV	0.4	00	0.4	25	00	0.0	00	0.0	0.4	0.2	Ω1	00
BER-TLV:	81	03	01	25	00	82	02	82	81	83	01	00

## **ENVELOPE 1.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 02

Coding:

BER-TLV: D3	07 82	02 01	81	90	01	02
-------------	-------	-------	----	----	----	----

## **ENVELOPE 1.1.2: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 12 Coding:

BER-TLV:	D3	07	82	02	01	81	90	01	12

# Expected Sequence 1.2 (SET UP MENU, Large Menu with many items or with large items or with Large Alpha Identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Large Menu with many items, Fetch of
		PENDING: SET UP MENU 1.2.1	FF bytes]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP MENU 1.2.1	
4	$ME \rightarrow USER$	Integrate the new menu header of	
-	WL → USLIX	"LargeMenu1" into its menu	
		system and have the menu items	
		of "Zero", "One", "Two", Three",	
		"Four", "Five", "Six", "Seven",	
		"Eight", "Nine", "Alpha", "Bravo",	
		"Charlie", "Delta", "Echo", "Fox-	
		trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green",	
		"Blue", "Violet", "Grey", "White",	
		"milli", "micro", "nano" and "pico"	
		under this header.	
5	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 1.2.1	
6	$SIM \to ME$	PROACTIVE SIM SESSION	
7	$USER \to ME$	ENDED Select the Toolkit "LargeMenu1"	
8	$ME \rightarrow USER$	Display "Zero", "One", "Two"	
	IVIL -> OOLIK	"pico"	
9	$USER \to ME$	Select the "Orange" menu entry	
10	$ME \to SIM$	Send the ENVELOPE 1.2.1:	
		MENU SELECTION	
44	0114 145	(Identifier of item: 0x3D)	Consend Laws Many with James House Fatal
11	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET UP MENU 1.2.2	[Second Large Menu with large items, Fetch of F6 bytes]
12	$ME \to SIM$	FETCH	or robytes]
13	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 1.2.2	
14	$ME \to USER$	Integrate the new menu header of	
		"LargeMenu2" into its menu	
		system and have the menu items of "1 Call Forward Unconditional",	
		"2 Call Forward On User Busy", "3	
		Call Forward On No Reply", "4 Call	
		Forward On User Not Reachable",	
		"5 Barring Of All Outgoing Calls",	
		"6 Barring Of All Outgoing Int	
		Calls" and "7 CLI Presentation" under this header.	
15	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
-	, 5	MENU 1.2.2	
16	$SIM \to ME$	PROACTIVE SIM SESSION	
47	11055	ENDED	
17	$USER \to ME$	Select the Toolkit Menu "LargeMenu2"	
18	$ME \rightarrow USER$	Display "1 Call Forward	
.0	WIL / OOLIN	Unconditional", "2 Call Forward On	
		User Busy", "3 Call Forward On No	
		Reply", "4 Call Forward On User	
		Not Reachable", "5 Barring Of All	
		Outgoing Calls", "6 Barring Of All	
		Outgoing Int Calls", "7 CLI Presentation"	
		1 TOSOTILATION	

Step	Direction	MESSAGE / Action	Comments
19	$USER \to ME$	Select the "5 Barring Of All	
		Outgoing Calls" menu entry	
20	$ME \rightarrow SIM$	Send the ENVELOPE 1.2.2:	
		MENU SELECTION	
21	SIM  o ME	(Identifier of item: 0xFB) PROACTIVE COMMAND	Third Large Menu with a Large Alpha
21	SIIVI → IVIE	PENDING: SET UP MENU 1.2.3	Identifier and only one Short Item, Fetch of FF
		LINDING. GET OF MENO 1.2.5	bytes]
22	$ME \to SIM$	FETCH	
23	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
	J	MENU 1.2.3	
24	$ME \to USER$	Integrate the new menu header of	
		" The SIM shall supply a set of	
		menu items, which shall be	
		integrated with the menu system	
		(or other MMI facility) in order to	
		give the user the opportunity to choose one of these menu items at	
		his own discretion. Each item	
		comprises a sh" into it's menu	
		system and have a menu item of	
		"Y" under this header.	
25	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 1.2.3	
26	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
0.7		ENDED	
27	$USER \to ME$	Select the Toolkit Menu "The SIM	
		shall supply a set of menu items, which shall be integrated with the	
		menu system (or other MMI	
		facility) in order to give the user the	
		opportunity to choose one of these	
		menu items at his own discretion.	
		Each item comprises a sh".	
28	$ME \to USER$	Display "Y"	
29	$USER \to ME$	Select the item "Y"	
30	$ME \to SIM$	Send the ENVELOPE 1.2.3:	
		MENU SELECTION	
		(Identifier of item: 1)	

## PROACTIVE COMMAND: SET UP MENU 1.2.1

## Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha Identifier: "LargeMenu1"

Item

Identifier of item: "50"
Text string of item: "Zero"

Item

Identifier of item: "4F"
Text string of item: "One"

Item

Identifier of item: "4E" Text string of item: "Two"

Item		
	Identifier of item: Text string of item:	"4D" "Three"
Item	Identifier of item: Text string of item:	"4C" "Four"
Item	Identifier of item: Text string of item:	"4B" "Five"
Item	Identifier of item: Text string of item:	"4A" "Six"
Item	Identifier of item: Text string of item:	"49" "Seven"
Item	Identifier of item: Text string of item:	"48" "Eight"
Item	Identifier of item: Text string of item:	"47" "Nine"
Item	Identifier of item: Text string of item:	"46" "Alpha"
Item	Identifier of item: Text string of item:	"45" "Bravo"
Item	Identifier of item: Text string of item:	"44" "Charlie"
Item	Identifier of item: Text string of item:	"43" "Delta"
Item	Identifier of item:	"42" "Echo"
Item	Text string of item:  Identifier of item:	"41"
Item	Text string of item:  Identifier of item:	"Fox-trot" "40"
Item	Text string of item:  Identifier of item:	"Black" "3F"
Item	Text string of item:  Identifier of item:	"Brown" "3E"
Item	Text string of item:  Identifier of item:	"Red" "3D"
Item	Text string of item:  Identifier of item:	"Orange" "3C"
Item	Text string of item:  Identifier of item:	"Yellow" "3B"
Item	Text string of item:  Identifier of item:	"Green" "3A"

Text string of item:

"Blue"

Item

"39" Identifier of item:

"Violet" Text string of item:

Item

"38" Identifier of item:

Text string of item: "Grey"

Item

Identifier of item: "37"

"White" Text string of item:

Item

Identifier of item: "36" Text string of item: "milli"

Item

"35" Identifier of item:

Text string of item: "micro"

Item

"34" Identifier of item:

Text string of item: "nano"

Item

"33" Identifier of item: Text string of item: "pico"

### Coding:

DED TIVE	Do	04	F0	0.4	00	04	0.5	00	00	00	04	00
BER-TLV:	D0	81	FC	81	03	01	25	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	31
	8F	05	50	5A	65	72	6F	8F	04	4F	4F	6E
	65	8F	04	4E	54	77	6F	8F	06	4D	54	68
	72	65	65	8F	05	4C	46	6F	75	72	8F	05
	4B	46	69	76	65	8F	04	4A	53	69	78	8F
	06	49	53	65	76	65	6E	8F	06	48	45	69
	67	68	74	8F	05	47	4E	69	6E	65	8F	06
	46	41	6C	70	68	61	8F	06	45	42	72	61
	76	6F	8F	08	44	43	68	61	72	6C	69	65
	8F	06	43	44	65	6C	74	61	8F	05	42	45
	63	68	6F	8F	09	41	46	6F	78	2D	74	72
	6F	74	8F	06	40	42	6C	61	63	6B	8F	06
	3F	42	72	6F	77	6E	8F	04	3E	52	65	64
	8F	07	3D	4F	72	61	6E	67	65	8F	07	3C
	59	65	6C	6C	6F	77	8F	06	3B	47	72	65
	65	6E	8F	05	3A	42	6C	75	65	8F	07	39
	56	69	6F	6C	65	74	8F	05	38	47	72	65
	79	8F	06	37	57	68	69	74	65	8F	06	36
	6D	69	6C	6C	69	8F	06	35	6D	69	63	72
	6F	8F	05	34	6E	61	6E	6F	8F	05	33	70
	69	63	6F									

PROACTIVE COMMAND: SET UP MENU 1.2.2

Logically:

Command details

Command number:

SET UP MENU Command type:

Command qualifier: "00"

Device identities

SIM Source device: Destination device: ME

Alpha Identifier: "LargeMenu2"

Item

Identifier of item:

Text string of item: "1 Call Forward Unconditional" Item

Identifier of item: "FE"

Text string of item: "2 Call Forward On User Busy"

Item

Identifier of item: "FD"

Text string of item: "3 Call Forward On No Reply"

Item

Identifier of item: "FC"

Text string of item: "4 Call Forward On User Not Reachable"

Item

Identifier of item: "FB"

Text string of item: "5 Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"

Text string of item: "6 Barring Of All Outgoing Int Calls"

Item

Identifier of item: "F9"

Text string of item: "7 CLI Presentation"

### Coding:

BER-TLV:	D0	81	F3	81	03	01	25	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	32
	8F	1D	FF	31	20	43	61	6C	6C	20	46	6F
	72	77	61	72	64	20	55	6E	63	6F	6E	64
	69	74	69	6F	6E	61	6C	8F	1C	FE	32	20
	43	61	6C	6C	20	46	6F	72	77	61	72	64
	20	4F	6E	20	55	73	65	72	20	42	75	73
	79	8F	1B	FD	33	20	43	61	6C	6C	20	46
	6F	72	77	61	72	64	20	4F	6E	20	4E	6F
	20	52	65	70	6C	79	8F	25	FC	34	20	43
	61	6C	6C	20	46	6F	72	77	61	72	64	20
	4F	6E	20	55	73	65	72	20	4E	6F	74	20
	52	65	61	63	68	61	62	6C	65	8F	20	FB
	35	20	42	61	72	72	69	6E	67	20	4F	66
	20	41	6C	6C	20	4F	75	74	67	6F	69	6E
	67	20	43	61	6C	6C	73	8F	24	FA	36	20
	42	61	72	72	69	6E	67	20	4F	66	20	41
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	20	43	61	6C	6C	73	8F	13	F9
	37	20	43	4C	49	20	50	72	65	73	65	6E
	74	61	74	69	6F	6E						

## PROACTIVE COMMAND: SET UP MENU 1.2.3

#### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha Identifier: "The SIM shall supply a set of menu items, which shall be integrated with the menu

system (or other MMI facility) in order to give the user the opportunity to choose

one of these menu items at his own discretion. Each item comprises a sh"

Item

Identifier of item: "01" Text string of item: "Y"

## Coding:

DED TIL	Б.											00
BER-TLV:	D0	81	FC	81	03	01	25	00	82	02	81	82
	85	81	EC	54	68	65	20	53	49	4D	20	73
	68	61	6C	6C	20	73	75	70	70	6C	79	20
	61	20	73	65	74	20	6F	66	20	6D	65	6E
	75	20	69	74	65	6D	73	2C	20	77	68	69
	63	68	20	73	68	61	6C	6C	20	62	65	20
	69	6E	74	65	67	72	61	74	65	64	20	77
	69	74	68	20	74	68	65	20	6D	65	6E	75
	20	73	79	73	74	65	6D	20	28	6F	72	20
	6F	74	68	65	72	20	4D	4D	49	20	66	61
	63	69	6C	69	74	79	29	20	69	6E	20	6F
	72	64	65	72	20	74	6F	20	67	69	76	65
	20	74	68	65	20	75	73	65	72	20	74	68
	65	20	6F	70	70	6F	72	74	75	6E	69	74
	79	20	74	6F	20	63	68	6F	6F	73	65	20
	6F	6E	65	20	6F	66	20	74	68	65	73	65
	20	6D	65	6E	75	20	69	74	65	6D	73	20
	61	74	20	68	69	73	20	6F	77	6E	20	64
	69	73	63	72	65	74	69	6F	6E	2E	20	45
	61	63	68	20	69	74	65	6D	20	63	6F	6D
	70	72	69	73	65	73	20	61	20	73	68	8F
	02	01	59									

TERMINAL RESPONSE: SET UP MENU 1.2.1, 1.2.2 and 1.2.3

Logically:

Command details

Command number:

Command type: SET UP MENU

Command qualifier:

"no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	25	00	82	02	82	81	83	01	00
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## **ENVELOPE 1.2.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 3D

BER-TLV:	D3	07	82	02	01	81	90	01	3D	
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#### **ENVELOPE 1.2.2: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier FB

Coding:

BER-TLV:	D3	07	82	02	01	81	90	01	FB
		<b>.</b>	~-	~-	• .	• .		• .	– .

#### **ENVELOPE 1.2.3: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad
Destination device: SIM
Item identifier 01

Coding:

BER-TLV:	D3	07	82	02	01	81	90	01	01
D		٠.	U_		<b>.</b>	<b>.</b>		<b>.</b>	○.

The following table details the test requirements with relation to the tested features:

	Proactive S	IM Command	Facilities
Proactive SIM Command Number	Alpha Identifier Length	Number of items	Maximum length of item
1.1.1	12	4	6
1.1.2	12	2	3
1.1.3	10	0	-
1.2.1	10	30	8
1.2.2	10	7	37
1.2.3	235	1	1

## 27.22.4.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 and in expected sequence 1.2.

## 27.22.4.8.2 SET UP MENU (help request support) and ENVELOPE MENU SELECTION

27.22.4.8.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.8.2.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

• 3GPP TS 11.14 [15] clause 12.21.

#### 27.22.4.8.2.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.2.4 Method of test

27.22.4.8.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.8.2.4.2 Procedure

## Expected Sequence 2.1 (SET UP MENU and MENU SELECTION, with Help Request, Replace and Remove a Toolkit Menu)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP	
		MENU 2.1.1	
4	$ME \rightarrow USER$	Integrate the menu header of	
		"Toolkit Menu" into its menu	
		system and have the menu items of "Item 1", "Item 2", "Item 3" and	
		"Item 4" under this header.	
5	$ME \rightarrow SIM$		[Command Performed Successfully]
	INIE 7 OIIVI	MENU 2.1.1	[Command Command Cassessiany]
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	
		Menu"	
8	$ME \rightarrow USER$	, , , , , , , , , , , , , , , , , , , ,	
		"Item 4"	
9	$USER \to ME$	Select the Help Request on	
10	ME CIM	"Item 2" Menu entry Send the ENVELOPE 2.1.1:	
10	$ME \rightarrow SIM$	MENU SELECTION	
		(Identifier of item: 2)	

PROACTIVE COMMAND: SET UP MENU 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "80"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item:4

Text string of item: "Item 4"

## Coding:

BER-TLV:	D0	3B	81	03	01	25	80	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	8F	07	04	49	74	65	6D	20
	34											

## TERMINAL RESPONSE: SET UP MENU 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

### **ENVELOPE 2.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad Destination device: SIM Item identifier 02

Help request tag

Coding:

BER-TLV: D3 09 82	02 01	81 90	01	02	15	00
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## 27.22.4.8.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.8.3 SET UP MENU (next action support) and ENVELOPE MENU SELECTION

#### 27.22.4.8.3.1 Definition and applicability

See clause 3.2.2.

If the SIM provides an Items Next Action Indicator data object, the comprehension required flag shall be set to '0'.

#### 27.22.4.8.3.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

• 3GPP TS 11.14 [15] clause 12.24.

#### 27.22.4.8.3.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the next action indicator is supported.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

#### 27.22.4.8.3.4 Method of test

#### 27.22.4.8.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.8.3.4.2 Procedure

## Expected Sequence 3.1 (SET UP MENU, next action indicator "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information", successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP MENU 3.1.1	
4	$ME \to USER$	Integrate the menu header of	
		"Toolkit Menu" into its menu	
		system and have the menu items	
		of "Item 1", "Item 2", "Item 3" and	
		"Item 4" under this header.	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 3.1.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	
	ME LIGER	Menu"	The NAT was a singlificate to the consensus.
8	ME → USER	Display "Item 1", "Item 2", "Item 3", "Item 4"	The ME may indicate to the user the consequences of performing the selection of
			an item.
9	$USER \to ME$	Navigate in the items, then select	The ME may indicate to the user the
		"Item 2".	consequences of performing the selection of
40		0	an item.
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

## **ENVELOPE 3.1.1: MENU SELECTION**

Logically:

Menu selection

Device identities

Source device: Keypad
Destination device: SIM
Item identifier 02

Coding:

BER-TLV: D3 07 82 02 01 81 90 01 02	
-------------------------------------	--

## PROACTIVE COMMAND: SET UP MENU 3.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item: 4

Text string of item: "Item 4"

Items next action indicator list

List: "Send SM", "Set Up Call", "Launch Browser", "Provide Local Information"

#### Coding:

BER-TLV:	D0	41	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	8F	07	04	49	74	65	6D	20
	34	18	04	13	10	15	26					

TERMINAL RESPONSE: SET UP MENU 3.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	25	00	82	02	82	81	83	01	00

#### 27.22.4.8.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

## 27.22.4.8.4 SET UP MENU (display of icons) and ENVELOPE MENU SELECTION

27.22.4.8.4.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.8.4.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1, with an additional one:

• GSM 11.14 clause 6.5.4, 12.31 and 12.32.

#### 27.22.4.8.4.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that icons are displayed with the command Set Up Menu in the Alpha Identifier and Items Data Objects. To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.4.4 Method of test

27.22.4.8.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.8.4.4.2 Procedure

## Expected Sequence 4.1A (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 4.1.1	
4	$ME \rightarrow USER$	Integrate the menu header of	
		"Toolkit Menu" into its menu	
		system and have the menu items	
		of "Item 1", "Item 2", "Item 3" under this header.	
5	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
	IVIL 7 OIIVI	MENU 4.1.1A	[command remained educationally]
6	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	Verify the icon is displayed with alpha id.
_		Menu"	
8	$ME \rightarrow USER$	Display "Item 1", "Item 2", "Item 3".	
9	$USER \to ME$	Navigate in the items, then select	Verify icons are displayed for each item.
4.0		"Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

## PROACTIVE COMMAND: SET UP MENU 4.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3
Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is not self explanatory

Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is not self explanatory

Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

BER-TLV:	D0	3C	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	9E	02	01	01	9F	04	01	05
	05	05										

TERMINAL RESPONSE: SET UP MENU 4.1.1A

Logically:

Command details

Command number:

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-ILV:
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## Expected Sequence 4.1B (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1	[First Set Up Menu]
2	$ME \rightarrow SIM$	FETCH	
3	• · · · · · · · · · · · · · · · · · · ·	PROACTIVE COMMAND SET UP MENU 4.1.1	
4	$ME \to USER$	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header.	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP MENU 4.1.1B	[Command performed successfully, but requested icon could not be displayed]
6	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
7		Select the Toolkit Menu "Toolkit Menu"	No icon is displayed with alpha id.
8	$ME \to USER$	Display "Item 1", "Item 2", "Item 3".	
9	$USER \to ME$	Navigate in the items, then select "Item 2".	no icon is displayed for each item.
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1: MENU SELECTION (Identifier of item: 2)	

TERMINAL RESPONSE: SET UP MENU 4.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 25 00 82 02 82 81 83 01 04

## Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$		[First Set Up Menu]
		PENDING: SET UP MENU 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP	
		MENU 4.2.1	
4	$ME \rightarrow USER$	Integrate the menu header of	
		"Toolkit Menu" into its menu	
		system and have the menu items	
		of "Item 1", "Item 2", "Item 3" under Ithis header.	
5	ME  o SIM		[Command Performed Successfully]
	IVIE -> SIIVI	MENU 4.2.1A	[Continuation enorthed Successibility]
		1.2.17	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	· · · · · · · · · · · · · · · · · · ·	ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit	Verify the icon is displayed in alpha id.
/		Menu"	
8	$ME \to USER$	Display "Item 1", "Item 2", "Item 3".	
9	$USER \to ME$	Navigate in the items, then select	Verify icons are displayed for each item.
		"Item 2".	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:	
		MENU SELECTION	
		(Identifier of item: 2)	

PROACTIVE COMMAND: SET UP MENU 4.2.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3
Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is self explanatory Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is self explanatory

Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

## Coding:

BER-TLV:	D0	3C	81	03	01	25	00	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32	8F	07	03	49	74
	65	6D	20	33	9E	02	00	01	9F	04	00	05
	05	05										

## TERMINAL RESPONSE: SET UP MENU 4.2.1A

## Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

#### Coding:

BER-TLV:	81	03	01	25	00	82	02	82	81	83	Λ1	00
DENTILV.	01	03	01	20	00	02	02	02	01	03	UI	00

## Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND SET UP MENU 4.2.1	
4	$ME \rightarrow USER$	Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under	
5	$ME \rightarrow SIM$	this header. TERMINAL RESPONSE: SET UP MENU 4.2.1B	[Command Performed Successfully]
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	No icon is displayed in alpha id.
8	$ME \rightarrow USER$	Display "Item 1", "Item 2", "Item 3".	

9	$USER \to ME$	Navigate in the items, then select	no icon is displayed for each item.	
		"Item 2".		
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:		
		MENU SELECTION		
		(Identifier of item: 2)		

#### TERMINAL RESPONSE: SET UP MENU 4.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	25	00	82	02	82	81	83	01	04
DLIX-ILV.	01	03	UI	20	00	02	02	02	01	03	Οī	U <del>-1</del>

#### 27.22.4.8.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

## 27.22.4.8.5 SET UP MENU (soft keys support) and ENVELOPE MENU SELECTION

27.22.4.8.5.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.8.5.2 Conformance requirement

Requirements are the same as in clause 27.22.4.8.1.1.

#### 27.22.4.8.5.3 Test purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that if soft key preferred is indicated in the command details and soft key for SET UP MENU is supported by the ME and the number of icon items does not exceed the number of soft keys available, then the ME displays those icons as soft key.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

27.22.4.8.5.4 Method of test

27.22.4.8.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.8.5.4.2 Procedure

## Expected Sequence 5.1 (SET UP MENU, SOFT KEY PREFERRED, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[First Set Up Menu]
		PENDING: SET UP MENU 5.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND SET UP	
		MENU 5.1.1	
4	$ME \to USER$	Integrate the menu header of	
		"Toolkit Menu" into its menu	
		system and have the menu items	
		of "Item 1", "Item 2" under this	
_		header.	
5	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[Command Performed Successfully]
		MENU 5.1.1	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
7	LICED ME	ENDED	
7	$USER \to ME$	Select the Toolkit Menu "Toolkit Menu"	
8	ME LICED		
		Display "Item 1", "Item 2"	Varify was and a last it area through a off layer
9	$USER \to ME$	Navigate in the items, then select "Item 2".	Verify we can select items through soft keys
10	ME . CIM	1	
10	$ME \rightarrow SIM$	Send the ENVELOPE 3.1.1:  MENU SELECTION	
		(Identifier of item: 2)	

## PROACTIVE COMMAND: SET UP MENU 5.1.1

### Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "01" (selection using soft key preferred)

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2
Text string of item: "Item 2"

#### Coding:

BER-TLV:	D0	29	81	03	01	25	01	82	02	81	82	85
	0C	54	6F	6F	6C	6B	69	74	20	4D	65	6E
	75	8F	07	01	49	74	65	6D	20	31	8F	07
	02	49	74	65	6D	20	32					

### TERMINAL RESPONSE: SET UP MENU 5.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "no help information available"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	25	00	82	02	82	81	83	01	00
D = 1 \ 1 = \ 1	U .	00	<b>O</b> .		00		~ <u> </u>	~ <u>~</u>	, o.	00	, o.	

#### 27.22.4.8.5.5 Test requirement

The ME shall operate in the manner defined in expected sequence 5.1.

#### 27.22.4.9 SELECT ITEM

#### 27.22.4.9.1 SELECT ITEM (mandatory features for ME supporting SELECT ITEM)

#### 27.22.4.9.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.9.1.2 Conformance requirement

The ME shall support the Proactive SIM: Select Item facility as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5, clause 6.4.9, clause 6.6.8, clause 6.8, clause 12.6, clause 13.4 and clause 14.

### 27.22.4.9.1.3 Test purpose

To verify that the ME correctly presents the set of items contained in the SELECT ITEM proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive SIM command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user", if the user has indicated the need to end the proactive SIM session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive SIM application session requested by the user", if the user has indicated the need to go backwards in the proactive SIM application session.

#### 27.22.4.9.1.4 Method of test

#### 27.22.4.9.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

## 27.22.4.9.1.4.2 Procedure

## Expected Sequence 1.1 (SELECT ITEM, mandatory features, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2",	
		"Item 3" and "Item 4" under the	
		header of "Toolkit Select".	
5	$USER \to ME$	Select "Item 2".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 1.1.1	

#### PROACTIVE COMMAND: SELECT ITEM 1.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1
Text string of item: "I

"Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Item

Identifier of item: 4

Text string of item: "Item 4"

### Coding:

BER-TLV:	D0	3D	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	8F	07	04	49	74	65
	6D	20	34									

#### TERMINAL RESPONSE: SELECT ITEM 1.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	02									

## Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.2.1	
4	$ME \rightarrow USER$	Present the items of "Zero", "One",	
		"Two", Three", "Four", "Five", "Six",	
		"Seven", "Eight", "Nine", "Alpha",	
		"Bravo", "Charlie", "Delta", "Echo",	
		"Fox-trot", "Black", "Brown", "Red",	
		"Orange", "Yellow", "Green",	
		"Blue", "Violet", "Grey", "White",	
		"milli", "micro", "nano" and "pico"	
_		under the header of "LargeMenu1"	
5		Select item "Orange".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 1.2.1	

### PROACTIVE COMMAND: SELECT ITEM 1.2.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "LargeMenu1"

Item

Identifier of item: "50" Text string of item: "Zero"

Item

Identifier of item: "4F" Text string of item: "One"

Item

Identifier of item: "4E" Text string of item: "Two"

Item

Identifier of item: "4D"
Text string of item: "Three"

Item

Identifier of item: "4C"
Text string of item: "Four"

Item

Identifier of item: "4B" Text string of item: "Five"

Item	Identifier of item:	" 4 A "
Item	Text string of item:	"4A" "Six"
10111	Identifier of item: Text string of item:	"49" "Seven"
Item	Identifier of item:	"48"
Item	Text string of item:  Identifier of item:	"Eight" "47"
Item	Text string of item:	"Nine"
Item	Identifier of item: Text string of item:	"46" "Alpha"
rtem	Identifier of item: Text string of item:	"45" "Bravo"
Item	Identifier of item:	"44"
Item	Text string of item:  Identifier of item:	"Charlie" "43"
Item	Text string of item:	"Delta"
Item	Identifier of item: Text string of item:	"42" "Echo"
	Identifier of item: Text string of item:	"41" "Fox-trot"
Item	Identifier of item: Text string of item:	"40" "Black"
Item	Identifier of item:	"3F"
Item	Text string of item:  Identifier of item:	"Brown" "3E"
Item	Text string of item:	"Red"
T4	Identifier of item: Text string of item:	"3D" "Orange"
Item	Identifier of item: Text string of item:	"3C" "Yellow"
Item	Identifier of item:	"3B"
Item	Text string of item:  Identifier of item:	"Green" "3A"
Item	Text string of item:	"Blue"
Item	Identifier of item: Text string of item:	"39" "Violet"
10111	Identifier of item: Text string of item:	"38" "Grey"
Item	Identifier of item: Text string of item:	"37" "White"
Item	Identifier of item:	"36"

Text string of item: "milli"

Item

Identifier of item: "35"
Text string of item: "micro"

Item

Identifier of item: "34"

Text string of item: "nano"

Item

Identifier of item: "33" Text string of item: "pico"

Coding:

BER-TLV:	D0	81	FC	81	03	01	24	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	31
	8F	05	50	5A	65	72	6F	8F	04	4F	4F	6E
	65	8F	04	4E	54	77	6F	8F	06	4D	54	68
	72	65	65	8F	05	4C	46	6F	75	72	8F	05
	4B	46	69	76	65	8F	04	4A	53	69	78	8F
	06	49	53	65	76	65	6E	8F	06	48	45	69
	67	68	74	8F	05	47	4E	69	6E	65	8F	06
	46	41	6C	70	68	61	8F	06	45	42	72	61
	76	6F	8F	80	44	43	68	61	72	6C	69	65
	8F	06	43	44	65	6C	74	61	8F	05	42	45
	63	68	6F	8F	09	41	46	6F	78	2D	74	72
	6F	74	8F	06	40	42	6C	61	63	6B	8F	06
	3F	42	72	6F	77	6E	8F	04	3E	52	65	64
	8F	07	3D	4F	72	61	6E	67	65	8F	07	3C
	59	65	6C	6C	6F	77	8F	06	3B	47	72	65
	65	6E	8F	05	3A	42	6C	75	65	8F	07	39
	56	69	6F	6C	65	74	8F	05	38	47	72	65
	79	8F	06	37	57	68	69	74	65	8F	06	36
	6D	69	6C	6C	69	8F	06	35	6D	69	63	72
	6F	8F	05	34	6E	61	6E	6F	8F	05	33	70
	69	63	6F									

TERMINAL RESPONSE: SELECT ITEM 1.2.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 3D

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	3D									

# Expected Sequence 1.3 (SELECT ITEM, call options, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SELECT ITEM 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SELECT ITEM 1.3.1	
4	ME → USER	Present the items of " Call Forwarding Unconditional", "Call Forwarding On User Busy", "Call Forwarding On No Reply", "Call Forwarding On User Not Reachable", "Barring Of All Outgoing Calls", "Barring Of All Outgoing International Calls" and "CLI Presentation" under the header of " LargeMenu2	
5	$USER \to ME$	Select item "Barring Of All Outgoing Calls".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
7	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	

#### PROACTIVE COMMAND: SELECT ITEM 1.3.1

# Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "LargeMenu2"

Item

Identifier of item: "FF"

Text string of item: "Call Forwarding Unconditional"

Item

Identifier of item: "FE"

Text string of item: "Call Forwarding On User Busy"

Item

Identifier of item: "FD"

Text string of item: "Call Forwarding On No Reply"

Item

Identifier of item: "FC'
Text string of item: "Cal

Text string of item: "Call Forwarding On User Not Reachable"

Item

Identifier of item: "FB"

Text string of item: "Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"

Text string of item: "Barring Of All Outgoing International Calls"

Item

Identifier of item: "F9"

Text string of item: "CLI Presentation"

# Coding:

BER-TLV:	D0	81	FB	81	03	01	24	00	82	02	81	82
	85	0A	4C	61	72	67	65	4D	65	6E	75	32
	8F	1E	FF	43	61	6C	6C	20	46	6F	72	77
	61	72	64	69	6E	67	20	55	6E	63	6F	6E
	64	69	74	69	6F	6E	61	6C	8F	1D	FE	43
	61	6C	6C	20	46	6F	72	77	61	72	64	69
	6E	67	20	4F	6E	20	55	73	65	72	20	42
	75	73	79	8F	1C	FD	43	61	6C	6C	20	46
	6F	72	77	61	72	64	69	6E	67	20	4F	6E
	20	4E	6F	20	52	65	70	6C	79	8F	26	FC
	43	61	6C	6C	20	46	6F	72	77	61	72	64
	69	6E	67	20	4F	6E	20	55	73	65	72	20
	4E	6F	74	20	52	65	61	63	68	61	62	6C
	65	8F	1E	FB	42	61	72	72	69	6E	67	20
	4F	66	20	41	6C	6C	20	4F	75	74	67	6F
	69	6E	67	20	43	61	6C	6C	73	8F	2C	FA
	42	61	72	72	69	6E	67	20	4F	66	20	41
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	65	72	6E	61	74	69	6F	6E	61
	6C	20	43	61	6C	6C	73	8F	11	F9	43	4C
	49	20	50	72	65	73	65	6E	74	61	74	69
	6F	6E										

TERMINAL RESPONSE: SELECT ITEM 1.3.1

Logically:

Command details

Command number:

1

Command type:

SELECT ITEM

Command qualifier:

"00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result:

Command performed successfully

Item identifier

Identifier of item chosen: FB

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
·	90	01	FB									

# Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.4.1	
4	$ME \rightarrow USER$	Present the items of "One" and	
		"Two" under the header of "Select	
5	LICED . ME	Item".	
5	$USER \to ME$	Indicate to go backwards in the proactive SIM application session.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Backward move in the proactive SIM
	IVIL -> SIIVI	ITEM 1.4.1A	application session requested by user
		or	application coccion requested by user
		TERMINAL RESPONSE: SELECT	
		ITEM 1.4.1B	
7	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.4.2	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.4.2	
10	$ME \rightarrow USER$		
		"Two" under the header of "Select	
11	LICED ME	Item".	
11	$USER \to ME$	Indicate to end the proactive SIM application and return the ME to	
		normal operation.	
12	$ME \rightarrow SIM$		Proactive SIM application terminated by the
	IVIL 70IIVI	ITEM 1.4.2A	user
		or	
		TERMINAL RESPONSE: SELECT	
		ITEM 1.4.2B	
13	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

# PROACTIVE COMMAND: SELECT ITEM 1.4.1 and 1.4.2

# Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Select Item"

Item

Identifier of item: "11"
Text string of item: "One"

Item

Identifier of item: "12" Text string of item: "Two"

BER-TLV:	D0	22	81	03	01	24	00	82	02	81	82	85
	0B	53	65	6C	65	63	74	20	49	74	65	6D
	8F	04	11	4F	6E	65	8F	04	12	54	77	6F

TERMINAL RESPONSE: SELECT ITEM 1.4.1A

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 11

TERMINAL RESPONSE: SELECT ITEM 1.4.1B

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Item identifier

Identifier of item chosen: XX

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	11
	90	01	XX									

TERMINAL RESPONSE: SELECT ITEM 1.4.2A

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: proactive SIM session terminated by the user

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 10

TERMINAL RESPONSE: SELECT ITEM 1.4.2B

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: proactive SIM session terminated by the user

Item identifier

Identifier of item chosen: XX

# Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	10
	90	01	XX									

# Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.5.1	
4	$ME \rightarrow USER$	Present the items of "Y" under the	
		header of "The SIM shall supply a	
		set of items from which the user	
		may choose one. Each item	
		comprises a short identifier (used	
		to indicate the selection) and a text	
		string. Optionally the SIM may	
		include an alpha identifier. The	
_		alpha identifier i".	
5		Select item "Y"	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
_		ITEM 1.5.1	
7	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

# PROACTIVE COMMAND: SELECT ITEM 1.5.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "The SIM shall supply a set of items from which the user may choose one. Each

item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i"

Item

Identifier of item: "01" Text string of item: "Y"

BER-TLV:	D0	81	FD	81	03	01	24	00	82	02	81	82
DEN-TEV.											_	
	85	81	ED	54	68	65	20	53	49	4D	20	73
	68	61	6C	6C	20	73	75	70	70	6C	79	20
	61	20	73	65	74	20	6F	66	20	69	74	65
	6D	73	20	66	72	6F	6D	20	77	68	69	63
	68	20	74	68	65	20	75	73	65	72	20	6D
	61	79	20	63	68	6F	6F	73	65	20	6F	6E
	65	2E	20	45	61	63	68	20	69	74	65	6D
	20	63	6F	6D	70	72	69	73	65	73	20	61
	20	73	68	6F	72	74	20	69	64	65	6E	74
	69	66	69	65	72	20	28	75	73	65	64	20
	74	6F	20	69	6E	64	69	63	61	74	65	20
	74	68	65	20	73	65	6C	65	63	74	69	6F
	6E	29	20	61	6E	64	20	61	20	74	65	78
	74	20	73	74	72	69	6E	67	2E	20	4F	70
	74	69	6F	6E	61	6C	6C	79	20	74	68	65
	20	53	49	4D	20	6D	61	79	20	69	6E	63
	6C	75	64	65	20	61	6E	20	61	6C	70	68
	61	20	69	64	65	6E	74	69	66	69	65	72
	2E	20	54	68	65	20	61	6C	70	68	61	20
	69	64	65	6E	74	69	66	69	65	72	20	
	69	8F	02	01	59							

TERMINAL RESPONSE: SELECT ITEM 1.5.1

Logically:

Command details

Command number:

SELECT ITEM

Command type: Command qualifier:

General Result:

"00"

Device identities

Source device: ME Destination device: SIM

Result

Command performed successfully

Item identifier

Identifier of item chosen: 01

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	01									

# Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 1.6.1	
4	$ME \rightarrow USER$	Present the items of "1 Call	
		Forward Unconditional", "2 Call	
		Forward On User Busy", "3 Call	
		Forward On No Reply", "4 Call	
		Forward On User Not Reachable",	
		"5 Barring Of All Outgoing Calls",	
		"6 Barring Of All Outgoing Int	
		Calls" and "7 CLI Presentation"	
		under the header of	
		"0LargeMenu".	
5	$USER \to ME$	Select item "5 Barring Of All	
		Outgoing Calls".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 1.6.1	

PROACTIVE COMMAND: SELECT ITEM 1.6.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "0LargeMenu"

Item

Identifier of item: "FF"

Text string of item: "1 Call Forward Unconditional"

Item

Identifier of item: "FE"

Text string of item: "2 Call Forward On User Busy"

Item

Identifier of item: "FD"

Text string of item: "3 Call Forward On No Reply"

Item

Identifier of item: "FC"

Text string of item: "4 Call Forward On User Not Reachable"

Item

Identifier of item: "FB"

Text string of item: "5 Barring Of All Outgoing Calls"

Item

Identifier of item: "FA"

Text string of item: "6 Barring Of All Outgoing Int Calls"

Item

Identifier of item: "F9"

Text string of item: "7 CLI Presentation"

5-5-11												
BER-TLV:	D0	81	F3	81	03	01	24	00	82	02	81	82
	85	0A	30	4C	61	72	67	65	4D	65	6E	75
	8F	1D	FF	31	20	43	61	6C	6C	20	46	6F
	72	77	61	72	64	20	55	6E	63	6F	6E	64
	69	74	69	6F	6E	61	6C	8F	1C	FE	32	20
	43	61	6C	6C	20	46	6F	72	77	61	72	64
	20	4F	6E	20	55	73	65	72	20	42	75	73
	79	8F	1B	FD	33	20	43	61	6C	6C	20	46
	6F	72	77	61	72	64	20	4F	6E	20	4E	6F
	20	52	65	70	6C	79	8F	25	FC	34	20	43
	61	6C	6C	20	46	6F	72	77	61	72	64	20
	4F	6E	20	55	73	65	72	20	4E	6F	74	20
	52	65	61	63	68	61	62	6C	65	8F	20	FB
	35	20	42	61	72	72	69	6E	67	20	4F	66
	20	41	6C	6C	20	4F	75	74	67	6F	69	6E
	67	20	43	61	6C	6C	73	8F	24	FA	36	20
	42	61	72	72	69	6E	67	20	4F	66	20	41
	6C	6C	20	4F	75	74	67	6F	69	6E	67	20
	49	6E	74	20	43	61	6C	6C	73	8F	13	F9
	37	20	43	4C	49	20	50	72	65	73	65	6E
	74	61	74	69	6F	6E						

TERMINAL RESPONSE: SELECT ITEM 1.6.1

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: FB

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	FB									

The following table details the test commands with relation to the tested features:

	Proactive SI	M Command	Facilities
Proactive SIM Command SELECT ITEM Number	Alpha Identifier Length	Number of items	Maximum length of item
1.1	14	4	6
1.2	10	30	8
1.3	10	7	43
1.4	11	2	3
1.5	236	1	1
1.6	10	7	37

# 27.22.4.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 (SELECT ITEM, mandatory features).

27.22.4.9.2 SELECT ITEM (next action support)

27.22.4.9.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.2.2 Conformance Requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.2.3 Test purpose

To verify that the mobile supports next action indicator mode.

27.22.4.9.2.4 Method of test

27.22.4.9.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.9.2.4.2 Procedure

## Expected Sequence 2.1 (SELECT ITEM, next action indicator, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 2.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 2.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	The ME may indicate to the user the
		and "Item 3" under the header of	consequences of performing the selection of
		"Toolkit Select".	an item.
5	$USER \to ME$	Navigate in the items, then select	The ME may indicate to the user the
		"Item 2".	consequences of performing the selection of
			an item.
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 2.1.1	

# PROACTIVE COMMAND: SELECT ITEM 2.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Items next action indicator

Items list "Send SM", "Set Up Call", "Provide Local Info."

Coding:

BER-TLV:	D0	39	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	18	03	13	10	26	

TERMINAL RESPONSE: SELECT ITEM 2.1.1

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 02

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	02									

27.22.4.9.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1

27.22.4.9.3 SELECT ITEM (default item support)

27.22.4.9.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.3.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.3.3 Test purpose

To verify that the mobile supports "default item" mode.

27.22.4.9.3.4 Method of test

27.22.4.9.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.9.3.4.2 Procedure

# Expected Sequence 3.1 (SELECT ITEM, default item, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		SELECT ITEM 3.1.1	
4	$ME \to USER$	Display items of "Item 1", "Item 2"	Check that "Item 2" is selected by default.
		and "Item 3" under the header of	
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 3".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	Command performed successfully
		ITEM 3.1.1	

## PROACTIVE COMMAND: SELECT ITEM 3.1.1

# Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02

Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Item identifier

Identifier of item chosen 02

## Coding:

BER-TLV:	D0	37	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	90	01	02			

# TERMINAL RESPONSE: SELECT ITEM 3.1.1

# Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device:

ME

Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 03

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	90	01	03									

## 27.22.4.9.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1

# 27.22.4.9.4 SELECT ITEM (help request support)

27.22.4.9.4.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.4.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.4.3 Test purpose

To verify that the mobile supports "help request" for the command Select Item.

27.22.4.9.4.4 Method of test

27.22.4.9.4.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

# 27.22.4.9.4.4.2 Procedure

# Expected Sequence 4.1 (SELECT ITEM, help request, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Help information available]
		SELECT ITEM 4.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	
		and "Item 3" under the header of	
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items until "Item 1".	
6	$USER \to ME$	Select the Help Request on "Item	
		1" Menu entry	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[Help information required by the user]
		ITEM 4.1.1	

# PROACTIVE COMMAND: SELECT ITEM 4.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "80" help information available

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

## Coding:

BER-TLV:	D0	34	81	03	01	24	80	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33						

# TERMINAL RESPONSE: SELECT ITEM 4.1.1

# Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "80"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Help information required by the user

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	80	82	02	82	81	83	01	13
_	90	01	01									

27.22.4.9.4.5 Test requirement

The ME shall operate in the manner defined in expected sequence 4.1

27.22.4.9.5 SELECT ITEM (icons support)

27.22.4.9.5.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.5.2 Conformance requirement

Same as clause 27.22.4.9.1.2 and 3GPP TS 11.14 [15] clause 12.31 and clause 12.32.

27.22.4.9.5.3 Test purpose

To verify that the mobile displays icons with the command Select Item.

27.22.4.9.5.4 Method of test

27.22.4.9.5.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.5.4.2 Procedure

# Expected Sequence 5.1A (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	Verify icons are displayed in the alpha
		and "Item 3" under the header of	identifier and in the 3 items.
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully]
		ITEM 5.1.1 A	

PROACTIVE COMMAND: SELECT ITEM 5.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "01" (icon is not self-explanatory)

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

Item icon identifier list:

Icon qualifier: "01" (icon is not self-explanatory)

Icon Identifier: record 5 in  $EF_{(IMG)}$ , record 5 in  $EF_{(IMG)}$ , record 5 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	3E	81	03	01	24	00	82	02	81	82	85
'-	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	9E	02	01	01	9F	04
	01	05	05	05								

## TERMINAL RESPONSE: SELECT ITEM 5.1.1A

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
'	90	01	01									

# Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.1.1	
4	$ME \to USER$	Display items of "Item 1", "Item 2"	no icon is displayed in the alpha identifier nor
		and "Item 3" under the header of	in the 3 items.
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \to SIM$	TERMINAL RESPONSE: SELECT	[Command performed successfully, but
		ITEM 5.1.1 B	requested icon could not be displayed]

TERMINAL RESPONSE: SELECT ITEM 5.1.1B

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	04
'	90	01	01									

# Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.2.1	
4	ME → USER	Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select".	Verify icons are displayed without text as alpha id and for the all 3 items.
5	$USER \to ME$	Navigate in the items, then select "Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT ITEM 5.2.1 A	[command performed successfully]

PROACTIVE COMMAND: SELECT ITEM 5.2.1

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "00" (icon is self-explanatory)

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

Item icon identifier list:

Icon qualifier: "00" (icon is self-explanatory)

Icon Identifier: record 5 in  $EF_{(IMG)}$ , record 5 in  $EF_{(IMG)}$ , record 5 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	3E	81	03	01	24	00	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33	9E	02	00	01	9F	04
	00	05	05	05								

## TERMINAL RESPONSE: SELECT ITEM 5.2.1A

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	00
	٩n	Λ1	01									

# Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 5.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 5.2.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	no icon is displayed with text as alpha id nor
		and "Item 3" under the header of	for the all 3 items.
		"Toolkit Select".	
5	$USER \rightarrow ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully but
		ITEM 5.2.1B	requested icon could not be displayed]

TERMINAL RESPONSE: SELECT ITEM 5.2.1B

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	00	82	02	82	81	83	01	04
	90	01	01									

27.22.4.9.5.5 Test requirement

The ME shall operate in the manner defined in expected sequences 5.1A to 5.2B.

27.22.4.9.6 SELECT ITEM (presentation style)

27.22.4.9.6.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.6.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.6.3 Test purpose

To verify that the mobile supports the "presentation style" with the command Select Item.

27.22.4.9.6.4 Method of test

27.22.4.9.6.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.9.6.4.2 Procedure

# Expected Sequence 6.1 (SELECT ITEM, PRESENTATION AS A CHOICE OF NAVIGATION OPTIONS, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 6.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 6.1.1	
4	$ME \to USER$	Display items of "Item 1", "Item 2"	Verify if presentation style appears.
		and "Item 3" under the header of	
		"Toolkit Select".	
5	$USER \to ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully]
		ITEM 6.1.1	

## PROACTIVE COMMAND: SELECT ITEM 6.1.1

## Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "03" (presentation as a choice of navigation options)

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

BER-TLV:	D0	34	81	03	01	24	03	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33						

TERMINAL RESPONSE: SELECT ITEM 6.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "03" (presentation as a choice of navigation options)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	03	82	02	82	81	83	01	00
	90	01	01									

# Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 6.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 6.2.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	Verify if presentation style appears
		and "Item 3" under the header of	
		"Toolkit Select".	
5	$USER \rightarrow ME$	Navigate in the items, then select	
		"Item 1".	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully]
		ITEM 6.2.1	

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "01" (presentation as a choice of data values)

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

## Coding:

BER-TLV:	D0	34	81	03	01	24	01	82	02	81	82	85
	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32	8F	07	03
	49	74	65	6D	20	33						

TERMINAL RESPONSE: SELECT ITEM 6.2.1

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "01"(presentation as a choice of data values)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	01	82	02	82	81	83	01	00
	90	01	01									

27.22.4.9.6.5 Test requirement

The ME shall operate in the manner defined in expected sequences 6.1 and 6.2.

27.22.4.9.7 SELECT ITEM (soft keys support)

27.22.4.9.7.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.7.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

27.22.4.9.7.3 Test purpose

To verify that the mobile supports the "soft keys" with the command Select Item.

27.22.4.9.7.4 Method of test

27.22.4.9.7.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

## 27.22.4.9.7.4.2 Procedure

# Expected Sequence 7.1 (SELECT ITEM, SELECTING USING SOFT KEYS PREFERRED, successful, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 7.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 7.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	
		under the header of "Toolkit	
		Select".	
5	$USER \to ME$	Navigate in the items, then select	Verify that we can choose an item through
		"Item 1".	soft keys
6	$ME \to SIM$	TERMINAL RESPONSE: SELECT	[command performed successfully]
		ITEM 7.1.1	

# PROACTIVE COMMAND: SELECT ITEM 7.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "04" (selection using soft keys preferred)

Device identities

Source device: SIM Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Coding:

BER-TLV:	D0	2B	81	03	01	24	04	82	02	81	82	85
-	0E	54	6F	6F	6C	6B	69	74	20	53	65	6C
	65	63	74	8F	07	01	49	74	65	6D	20	31
	8F	07	02	49	74	65	6D	20	32			

# TERMINAL RESPONSE: SELECT ITEM 7.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "04" (selection using soft keys preferred)

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Item identifier

Identifier of item chosen: 01

Coding:

BER-TLV:	81	03	01	24	04	82	02	82	81	83	01	00
	90	01	01									

## 27.22.4.9.7.5 Test requirement

The ME shall operate in the manner defined in expected sequence 7.1.

# 27.22.4.9.8 SELECT ITEM (Support of "No response from user")

27.22.4.9.8.1 Definition and applicability

See clause 3.2.2.

27.22.4.9.8.2 Conformance requirement

Same as clause 27.22.4.9.1.2.

# 27.22.4.9.8.3 Test purpose

To verify that after a period of user inactivity the ME returns a "No response from user" result value in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.9.8.4 Method of test

27.22.4.9.8.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME Manufacturer shall have defined the "no response from user" period of time.

The SIM simulator shall be set to that period of time.

# 27.22.4.9.8.4.2 Procedure

# **Expected Sequence 8.1 (SELECT ITEM, no response from user)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SELECT ITEM 8.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	
		SELECT ITEM 8.1.1	
4	$ME \rightarrow USER$	Display items of "Item 1", "Item 2"	
		and "Item 3" under the header of	
		" <time-out>".</time-out>	
5	USER	Waiting and no completion	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: SELECT	[No response from user] within 5 s after the
		ITEM 8.1.1	end of that defined period of time
7	USER	Check if the delay of TERMINAL	
		RESPONSE is reasonable or not	

PROACTIVE COMMAND: SELECT ITEM 8.1.1

Logically:

Command details

Command number: 1

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha identifier: "<TIME-OUT>"

Item

Identifier of item: 01

Text string of item: "Item 1"

Item

Identifier of item: 02
Text string of item: "Item 2"

Item

Identifier of item: 03
Text string of item: "Item 3"

Coding:

BER-TLV:	D0	30	81	03	01	24	00	82	02	81	82	85
	0A	3C	54	49	4D	45	2D	4F	55	54	3E	8F
	07	01	49	74	65	6D	20	31	8F	07	02	49
	74	65	6D	20	32	8F	07	03	49	74	65	6D
	20	33										

**TERMINAL RESPONSE: SELECT ITEM 8.1.1** 

Logically:

Command details

Command number:

Command type: SELECT ITEM

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: No response from user

Coding:

BER-TLV: 81 03 01 24 00 82 02 82 81 83 01 12

27.22.4.9.8.5 Test requirement

The ME shall operate in the manner defined in expected sequence 8.1.

27.22.4.10 SEND SHORT MESSAGE

27.22.4.10.1 SEND SHORT MESSAGE (normal)

27.22.4.10.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.10.1.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 and clause 5.2.

#### 27.22.4.10.1.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

#### 27.22.4.10.1.4 Method of test

#### 27.22.4.10.1.4.1 Initial conditions

The ME is connected to the system Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.10.1.4.2 Procedure

# Expected Sequence 1.1(SEND SHORT MESSAGE, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.1.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.1	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.1.1	

# PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding
Message class
TP-UDL

8-bit data
class 0
T2

TP-UD "Test Message"

## Coding:

BER-TLV:	D0	37	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65			

# SMS-PP (SEND SHORT MESSAGE) Message 1.1

## Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

#### Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

## TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

# Expected Sequence 1.2 (SEND SHORT MESSAGE, packing required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing required, 8-bit data]
		SHORT MESSAGE 1.2.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.2.1	

## PROACTIVE COMMAND: SEND SHORT MESSAGE 1.2.1

Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 7

TP-UD "Send SM"

# Coding:

BER-TLV:	D0	32	81	03	01	13	01	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	13	01	00	09
	91	10	32	54	76	F8	40	F4	07	53	65	6E
	64	20	53	4D								

## SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 7

TP-UD "Send SM"

Coding:

Ī	BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F0	07
		D3	B2	9B	0C	9A	36	01					

## TERMINAL RESPONSE: SEND SHORT MESSAGE 1.2.1

Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	13	01	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

# Expected Sequence 1.3 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.3.1	
4	$ME \rightarrow USER$	Display "Short Message"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.3	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.3.1	

## PROACTIVE COMMAND: SEND SHORT MESSAGE 1.3.1

## Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Short Message"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

**TP-DCS** 

Message coding SMS default alphabet

Message class 0
TP-UDL 13

TP-UD "Short Message"

BER-TLV:	D0	3D	81	03	01	13	00	82	02	81	83	85
	0D	53	68	6F	72	74	20	4D	65	73	73	61
	67	65	86	09	91	11	22	33	44	55	66	77
	F8	8B	18	01	00	09	91	10	32	54	76	F8
	40	F0	0D	53	F4	5B	4E	07	35	CB	F3	79
	F8	5C	06									

# SMS-PP (SEND SHORT MESSAGE) Message 1.3

## Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

**TP-DCS** 

Message coding SMS default alphabet

Message class 0 TP-UDL 13

TP-UD "Short Message"

#### Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F0	0D
	53	F4	5B	4E	07	35	СВ	F3	79	F8	5C	06

## TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	01	03	01	12	00	92	02	92	01	0.2	01	00
DEK-ILV.	01	03	01	13	UU	02	02	82	01	ೲ	UI	UU

# Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, 8 bit data, message of 160 characters user data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.4. 1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing required, 8 bit data]
		SHORT MESSAGE 1.4.1	
4	$ME \rightarrow USER$	, , ,	[Alpha Identifier]
		holds the RP_Destination_Address	
		"	
5	$ME \to SS$		[message of 140 bytes user data]
		MESSAGE) Message 1.4	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.4.1	

## PROACTIVE COMMAND: SEND SHORT MESSAGE 1.4.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "The address data object holds the RP\_Destination\_Address"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8 bit data Message class class 0 TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an

SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can

be passed transp"

# Coding:

BER-TLV:	D0	81	FD	81	03	01	13	01	82	02	81	83
	85	38	54	68	65	20	61	64	64	72	65	73
	73	20	64	61	74	61	20	6F	62	6A	65	63
	74	20	68	6F	6C	64	73	20	74	68	65	20
	52	50	11	44	65	73	74	69	6E	61	74	69
	6F	6E	11	41	64	64	72	65	73	73	86	09
	91	11	22	33	44	55	66	77	F8	8B	81	AC
	01	00	09	91	10	32	54	76	F8	40	F4	A0
	54	77	6F	20	74	79	70	65	73	20	61	72
	65	20	64	65	66	69	6E	65	64	3A	20	2D
	20	41	20	73	68	6F	72	74	20	6D	65	73
	73	61	67	65	20	74	6F	20	62	65	20	73
	65	6E	74	20	74	6F	20	74	68	65	20	6E
	65	74	77	6F	72	6B	20	69	6E	20	61	6E
	20	53	4D	53	2D	53	55	42	4D	49	54	20
	6D	65	73	73	61	67	65	2C	20	6F	72	20
	61	6E	20	53	4D	53	2D	43	4F	4D	4D	41
	4E	44	20	6D	65	73	73	61	67	65	2C	20
	77	68	65	72	65	20	74	68	65	20	75	73
	65	72	20	64	61	74	61	20	63	61	6E	20
	62	65	20	70	61	73	73	65	64	20	74	72
	61	6E	73	70								

# SMS-PP (SEND SHORT MESSAGE) Message 1.4

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an

SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can

be passed transp"

# Coding:

BER-TLV:		01	00	09	91	10	32	54	76	F8	40	F0
	A0	D4	FB	1B	44	CF	C3	CB	73	50	58	5E
	06	91	СВ	E6	B4	BB	4C	D6	81	5A	A0	20
	68	8E	7E	СВ	E9	A0	76	79	3E	0F	9F	CB
	20	FA	1B	24	2E	83	E6	65	37	1D	44	7F
	83	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28
	ED	06	85	DD	A0	69	73	DA	9A	56	85	CD
	24	15	D4	2E	CF	E7	E1	73	99	05	7A	CB
	41	61	37	68	DA	9C	B6	86	CF	66	33	E8
	24	82	DA	E5	F9	3C	7C	2E	В3	40	77	74
	59	5E	06	D1	D1	65	50	7D	5E	96	83	C8
	61	7A	18	34	0E	BB	41	E2	32	80	1E	9E
	CF	СВ	64	10	5D	1E	76	CF	E1			

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.4.1

Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BEK-ILV:	81	03	01	13	01	82	02	82	81	83	01	00

# Expected Sequence 1.5 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, message of 160 characters user data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.5.1	
4	$ME \to USER$	Display "The address data object	[Alpha Identifier]
		holds the RP Destination Address "	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	[message of 140 bytes user data]
		MESSAGE) Message 1.5	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.5.1	

PROACTIVE COMMAND: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "The address data object holds the RP Destination Address"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an

SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can

be passed transp"

#### Coding:

BER-TLV:	D0	81	E9	81	03	01	13	00	82	02	81	83
	85	38	54	68	65	20	61	64	64	72	65	73
	73	20	64	61	74	61	20	6F	62	6A	65	63
	74	20	68	6F	6C	64	73	20	74	68	65	20
	52	50	20	44	65	73	74	69	6E	61	74	69
	6F	6E	20	41	64	64	72	65	73	73	86	09
	91	11	22	33	44	55	66	77	F8	8B	81	98
	01	00	09	91	10	32	54	76	F8	40	F0	A0
	D4	FB	1B	44	CF	C3	СВ	73	50	58	5E	06
	91	СВ	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	СВ	E9	A0	76	79	3E	0F	9F	СВ	20
	FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
	06	85	DD	A0	69	73	DA	9A	56	85	CD	24
	15	D4	2E	CF	E7	E1	73	99	05	7A	СВ	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	В3	40	77	74	59
	5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
	7A	18	34	0E	BB	41	E2	32	08	1E	9E	CF
	CB	64	10	5D	1E	76	CF	E1				

# SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0 TP-UDL 160

TP-UD "Two types are defined: - A short message to be sent to the network in an SMS-

SUBMIT message, or an SMS-COMMAND message, where the user data can be

passed transp"

## Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F0	A0
DEK-ILV.	UI			91	_			70	го	40		AU
	D4	FB	1B	44	CF	C3	CB	73	50	58	5E	06
	91	СВ	E6	B4	BB	4C	D6	81	5A	A0	20	68
	8E	7E	СВ	E9	A0	76	79	3E	0F	9F	СВ	20
	FA	1B	24	2E	83	E6	65	37	1D	44	7F	83
	E8	E8	32	C8	5D	A6	DF	DF	F2	35	28	ED
	06	85	DD	A0	69	73	DA	9A	56	85	CD	24
	15	D4	2E	CF	E7	E1	73	99	05	7A	СВ	41
	61	37	68	DA	9C	B6	86	CF	66	33	E8	24
	82	DA	E5	F9	3C	7C	2E	В3	40	77	74	59
	5E	06	D1	D1	65	50	7D	5E	96	83	C8	61
	7A	18	34	0E	BB	41	E2	32	80	1E	9E	CF
	СВ	64	10	5D	1E	76	CF	E1				

## TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

DED TIV.	0.4	00	0.4	40	00	00	00	0.0	0.4	00	0.4	00
BEK-II V	1 81	U.3	()1	1.3	00	1 8/	1 ()/	I 8/	1 81	I 8.3	01	00

# Expected Sequence 1.6 (SEND SHORT MESSAGE, alpha identifier 160 bytes long, SMS default alphabet, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, SMS default alphabet]
		SHORT MESSAGE 1.6.1	
4	$ME \rightarrow USER$	Display "Two types are defined: - A	[Alpha Identifier of 160 bytes]
		short message to be sent to the	
		network in an SMS-SUBMIT	
		message, or an SMS-COMMAND	
		message, where the user data can	
		be passed transparently; - A short	
		message to be sent to the network	
		in an SMS-SUBMIT "	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.6	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$		[Command performed successfully]
		SHORT MESSAGE 1.6.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.6.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Two types are defined: - A short message to be sent to the network in an

SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can

be passed transparently; - A short message to be sent to the network in an

SMS-SUBMIT"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "01"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0
TP-UDL 1
TP-UD " "

D0	81	FD	81	03	01	13	00	82	02	81	83
85	81	E6	54	77	6F	20	74	79	70	65	73
20	61	72	65	20	64	65	66	69	6E	65	64
3A	20	2D	20	41	20	73	68	6F	72	74	20
6D	65	73	73	61	67	65	20	74	6F	20	62
65	20	73	65	6E	74	20	74	6F	20	74	68
65	20	6E	65	74	77	6F	72	6B	20	69	6E
20	61	6E	20	53	4D	53	2D	53	55	42	4D
49	54	20	6D	65	73	73	61	67	65	2C	20
6F	72	20	61	6E	20	53	4D	53	2D	43	4F
4D	4D	41	4E	44	20	6D	65	73	73	61	67
65	2C	20	77	68	65	72	65	20	74	68	65
20	75	73	65	72	20	64	61	74	61	20	63
61	6E	20	62	65	20	70	61	73	73	65	64
20	74	72	61	6E	73	70	61	72	65	6E	74
6C	79	3B	20	2D	20	41	20	73	68	6F	72
74	20	6D	65	73	73	61	67	65	20	74	6F
20	62	65	20	73	65	6E	74	20	74	6F	20
74	68	65	20	6E	65	74	77	6F	72	6B	20
69	6E	20	61	6E	20	53	4D	53	2D	53	55
42	4D	49	54	20	8B	09	01	00	02	91	10
40	F0	01	20								
	85 20 3A 6D 65 65 20 49 6F 4D 65 20 61 20 6C 74 20 74 69 42	85 81 20 61 3A 20 6D 65 65 20 65 20 20 61 49 54 6F 72 4D 4D 65 2C 20 75 61 6E 20 74 6C 79 74 20 20 62 74 68 69 6E 42 4D	85 81 E6 20 61 72 3A 20 2D 6D 65 73 65 20 6E 20 61 6E 49 54 20 6F 72 20 4D 4D 41 65 2C 20 20 75 73 61 6E 20 20 74 72 6C 79 3B 74 20 6D 20 62 65 74 68 65 69 6E 20 42 4D 49	85 81 E6 54 20 61 72 65 3A 20 2D 20 6D 65 73 73 65 20 73 65 65 20 6E 65 20 61 6E 20 49 54 20 6D 6F 72 20 61 4D 4D 41 4E 65 2C 20 77 20 75 73 65 61 6E 20 62 20 74 72 61 6C 79 3B 20 74 20 6D 65 20 62 65 20 74 68 65 20 69 6E 20 61 42 4D 49 54	85 81 E6 54 77 20 61 72 65 20 3A 20 2D 20 41 6D 65 73 73 61 65 20 73 65 6E 65 20 6E 65 74 20 61 6E 20 53 49 54 20 6D 65 6F 72 20 61 6E 4D 4D 41 4E 44 65 2C 20 77 68 20 75 73 65 72 61 6E 20 62 65 20 74 72 61 6E 6C 79 3B 20 2D 74 20 6D 65 73 20 62 65 20 73 74 68 65 20 6E 69 6E 20 61 6E 42 4D 49 54 20	85         81         E6         54         77         6F           20         61         72         65         20         64           3A         20         2D         20         41         20           6D         65         73         73         61         67           65         20         73         65         6E         74           65         20         6E         65         74         77           20         61         6E         20         53         4D           49         54         20         6D         65         73           6F         72         20         61         6E         20           4D         4D         41         4E         44         20           65         2C         20         77         68         65           20         75         73         65         72         20           61         6E         20         62         65         20           20         74         72         61         6E         73           6C         79         3B         20         <	85         81         E6         54         77         6F         20           20         61         72         65         20         64         65           3A         20         2D         20         41         20         73           6D         65         73         73         61         67         65           65         20         73         65         6E         74         20           65         20         6E         65         74         77         6F           20         61         6E         20         53         4D         53           49         54         20         6D         65         73         73           6F         72         20         61         6E         20         53           4D         4D         41         4E         44         20         6D           65         2C         20         77         68         65         72           20         75         73         65         72         20         64           61         6E         20         62         65         20	85         81         E6         54         77         6F         20         74           20         61         72         65         20         64         65         66           3A         20         2D         20         41         20         73         68           6D         65         73         73         61         67         65         20           65         20         73         65         6E         74         20         74           65         20         6E         65         74         77         6F         72           20         61         6E         20         53         4D         53         2D           49         54         20         6D         65         73         73         61           6F         72         20         61         6E         20         53         4D           4D         4D         41         4E         44         20         6D         65           65         2C         20         77         68         65         72         65           20         75         73	85         81         E6         54         77         6F         20         74         79           20         61         72         65         20         64         65         66         69           3A         20         2D         20         41         20         73         68         6F           6D         65         73         73         61         67         65         20         74           65         20         73         65         6E         74         20         74         6F           65         20         6E         65         74         77         6F         72         6B           20         61         6E         20         53         4D         53         2D         53           49         54         20         6D         65         73         73         61         67           6F         72         20         61         6E         20         53         4D         53           4D         4D         41         4E         44         20         6D         65         73           4D         4D	85         81         E6         54         77         6F         20         74         79         70           20         61         72         65         20         64         65         66         69         6E           3A         20         2D         20         41         20         73         68         6F         72           6D         65         73         73         61         67         65         20         74         6F           65         20         73         65         6E         74         20         74         6F         20           65         20         6E         65         74         77         6F         72         6B         20           20         61         6E         20         53         4D         53         2D         53         55           49         54         20         6D         65         73         73         61         67         65           6F         72         20         61         6E         20         53         4D         53         2D           4D         4D         41	85         81         E6         54         77         6F         20         74         79         70         65           20         61         72         65         20         64         65         66         69         6E         65           3A         20         2D         20         41         20         73         68         6F         72         74           6D         65         73         73         61         67         65         20         74         6F         20           65         20         73         65         6E         74         20         74         6F         20         74           65         20         6E         65         74         77         6F         72         6B         20         69           20         61         6E         20         53         4D         53         2D         53         55         42           49         54         20         6D         65         73         73         61         67         65         2C           6F         72         20         61         6E         20

# SMS-PP (SEND SHORT MESSAGE) Message 1.6

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "01"

TP-PID Short message type 0

TP-DCS

Message coding SMS default alphabet

Message class 0
TP-UDL 1
TP-UD " "

Coding:

BER-1LV.   01   00   02   91   10   40   F0   01   20	BER-TLV:	01	00	02	91	10	40	F0	01	20
---	----------	----	----	----	----	----	----	----	----	----

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE Command qualifier: packing not required Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TL'	/: 8	31	03	01	13	00	82	02	82	81	83	01	00	l
---------	------	----	----	----	----	----	----	----	----	----	----	----	----	---

# Expected Sequence 1.7(SEND SHORT MESSAGE, alpha identifier length '00', packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.7.1	
4	ME	No information to user	[Alpha identifier length '00']
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.7	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 1.7.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.7.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network

Alpha identifier:

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

BER-TLV:	D0	30	81	03	01	13	00	82	02	81	83	85
	00	86	09	91	11	22	33	44	55	66	77	F8
	8B	18	01	00	09	91	10	32	54	76	F8	40
	F4	0C	54	65	73	74	20	4D	65	73	73	61
	67	65										

### SMS-PP (SEND SHORT MESSAGE) Message 1.7

Logically:

SMS TPDU

**SMS-SUBMIT** TP-MTI

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-Reply-Path is not set in this SMS-SUBMIT TP-RP TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

8-bit data Message coding class 0 Message class TP-UDL 12

TP-UD "Test Message"

Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.7.1

Logically:

Command details

Command number:

SEND SHORT MESSAGE Command type: packing not required

Command qualifier:

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00	l

# Expected Sequence 1.8 (SEND SHORT MESSAGE, packing not required, 8-bit data, no alpha identifier, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 1.8.1	
4	$ME \rightarrow USER$	May give information to user	[No Alpha Identifier]
		concerning what is happening	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 1.8	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
1		SHORT MESSAGE 1.8.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.8.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

BER-TLV:	D0	2E	81	03	01	13	00	82	02	81	83	86	l
	09	91	11	22	33	44	55	66	77	F8	8B	18	l
	01	00	09	91	10	32	54	76	F8	40	F4	0C	l
	54	65	73	74	20	4D	65	73	73	61	67	65	ı

# SMS-PP (SEND SHORT MESSAGE) Message 1.8

#### Logically:

**SMS TPDU** 

**SMS-SUBMIT** TP-MTI

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-Reply-Path is not set in this SMS-SUBMIT TP-RP TP-UDHI The TP-UD field contains only the short message

A status report is not requested TP-SRR

"00" TP-MR

TP-DA

TON International number

"ISDN / telephone numbering plan" NPI

"012345678" Address value

TP-PID Short message type 0

**TP-DCS** 

8-bit data Message coding class 0 Message class TP-UDL 12

TP-UD "Test Message"

#### Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.8.1

# Logically:

Command details

Command number: 1

SEND SHORT MESSAGE Command type: packing not required

Command qualifier:

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	01	03	01	12	00	92	02	92	01	0.2	01	00
DEK-ILV.	01	03	01	13	UU	02	02	82	01	ೲ	UI	UU

#### 27.22.4.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.8.

#### 27.22.4.10.2 SEND SHORT MESSAGE (UCS2 support)

#### 27.22.4.10.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.10.2.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.10, clause 6.6.9, clause 12.6, clause 12.7, clause 12.2, clause 12.1, clause 12.13, clause 12.31 and clause 5.2.

Additionally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17].

#### 27.22.4.10.2.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.2.4 Method of test

27.22.4.10.2.4.1 Initial conditions

The ME is connected to the system Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.10.2.4.2 Procedure

#### Expected Sequence 2.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 16-bit data]
		SHORT MESSAGE 2.1.1	
4	$ME \rightarrow USER$	Display "Send SM"	[Alpha Identifier]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	["ЗДРАВСТВУЙТЕ" = "Hello" in Russian]
		MESSAGE) Message 2.1	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 2.1.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE: 2.1.1

# Logically:

Command details

Command number:

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 16-bit data Message class class 0 TP-UDL 24

ТР-UD "ЗДРАВСТВУЙТЕ"

#### Coding:

BER-TLV:	D0	43	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	24	01	00	09
	91	10	32	54	76	F8	40	08	18	04	17	04
	14	04	20	04	10	04	12	04	21	04	22	04
	12	04	23	04	19	04	22	04	15			

#### SMS-PP (SEND SHORT MESSAGE) Message 2.1

### Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding UCS2 (16-bit data)

Message class 0 TP-UDL 24

ТР-UD "ЗДРАВСТВУЙТЕ"

#### Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	80	18
	04	17	04	14	04	20	04	10	04	12	04	21
	04	22	04	12	04	23	04	19	04	22	04	15

# TERMINAL RESPONSE: SEND SHORT MESSAGE 2.1.1

# Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

	BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00
--	----------	----	----	----	----	----	----	----	----	----	----	----	----

#### 27.22.4.10.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

### 27.22.4.10.3 SEND SHORT MESSAGE (icon support)

27.22.4.10.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.10.3.2 Conformance requirement

27.22.4.10.3.3 Test purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.3.4 Method of test

27.22.4.10.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME screen shall be in its normal stand-by display.

27.22.4.10.3.4.2 Procedure

# Expected Sequence 3.1A (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 3.1.1	
4	$ME \rightarrow USER$	Displays the icon and not the	[basic icon self-explanatory]
		alpha identifier	
5	$ME \rightarrow SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.1	
6	$SS \rightarrow ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 3.1.1A	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 3.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "NO ICON"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8bit-data Message class class 0 TP-UDL 12

TP-UD "Test Message"

Icon Identifier

Icon Qualifier self-explanatory

Icon Identifier 1 (number of record in EF IMG)

#### Coding:

BER-TLV:	D0	3B	81	03	01	13	00	82	02	81	83	85
·	07	4E	4F	20	49	43	4F	4E	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65	9E	02	00
	01											

# SMS-PP (SEND SHORT MESSAGE) Message 3.1

#### Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

"012345678" Address value

Short message type 0 TP-PID

TP-DCS

8-bit data Message coding Message class class 0 TP-UDL 12

"Test Message" TP-UD

Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
·	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1A

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

# Expected Sequence 3.1B (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data, basic icon
		SHORT MESSAGE 3.1.1	self-explanatory]]
4	$ME \rightarrow USER$	Displays the alpha identifier	·
		without the icon	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.1	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SHORT MESSAGE 3.1.1B	requested icon could not be displayed]

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 3.1.1B

Logically:

Command details

Command number:

SEND SHORT MESSAGE Command type: packing not required

Command qualifier:

Device identities

Source device: ME SIM Destination device:

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	04	Ì
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

# Expected Sequence 3.2A (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data]
		SHORT MESSAGE 3.2.1	
4	$ME \rightarrow USER$	display the icon and "Send SM"	[basic icon non-self-explanatory]
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SHORT MESSAGE 3.2.1A	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 3.2.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha Identifier "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8bit-data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Icon Identifier

Icon Qualifier non-self-explanatory

Icon Identifier 1 (number of record in EF IMG)

BER-TLV:	D0	3B	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65	1E	02	01
	01											

# SMS-PP (SEND SHORT MESSAGE) Message 3.2

Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

# TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1A

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	13	00	82	02	82	81	83	01	00

# Expected Sequence 3.2B (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SHORT	
		MESSAGE 3.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[packing not required, 8-bit data, basic icon
		SHORT MESSAGE 3.2.1	non-self-explanatory ]
4	$ME \rightarrow USER$	display "Send SM" without the icon	
5	$ME \to SS$	Send SMS-PP (SEND SHORT	
		MESSAGE) Message 3.2	
6	$SS \to ME$	SMS RP-ACK	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SHORT MESSAGE 3.2.1B	requested icon could not be displayed]

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 3.2.1B

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed;

Coding:

E
---

# 27.22.4.10.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.2B.

#### 27.22.4.11 SEND SS

# 27.22.4.11.1 SEND SS (normal)

#### 27.22.4.11.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.11.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send SS facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.11, clause 6.6.10, clause 12.12.1, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.14, clause 12.31 and clause 6.5.4.

# 27.22.4.11.1.3 Test purpose

To verify that the ME correctly translates and sends the supplementary service request indicated in the SEND SS proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the SS and any contents of the SS result as additional data.

27.22.4.11.1.4 Method of test

27.22.4.11.1.4.1 Initial conditions

The ME is connected to the System Simulator and the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.11.1.4.2 Procedure

#### Expected Sequence 1.1 (SEND SS, call forward unconditional, all bearers, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		SS 1.1.1	
4	$ME \to USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	
		SS 1.1.1	

#### PROACTIVE COMMAND: SEND SS 1.1.1

# Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Call Forward"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

#### Coding:

BER-TLV:	D0	27	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	0E	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	B9							

### **REGISTER 1.1**

Logically (only SS argument):

#### REGISTER SS ARGUMENT

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

ForwardedToNumber

- nature of address ind.: international

- numbering plan ind.: ISDN/Telephony (E.164)

- TBCD String: 01234567890123456789

#### Coding:

BER-TLV	30	13	04	01	21	83	01	00	84	0B	91	10
	32	54	76	98	10	32	54	76	98			

#### RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from operation code):

# REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

Forward Feature List

ForwardingFeature

TeleserviceCode

- All Tele Services

#### SS-Status

- state ind.: operative- provision ind.: provisioned- registration ind.: registered

- activation ind.: active

# ForwardedToNumber

- nature of address ind.: international

- numbering plan ind.: ISDN/Telephony (E.164)- TBCD String: 01234567890123456789

Coding:

BER-TLV	0A	A0	1A	04	01	21	30	15	30	13	83	01
	00	84	01	07	84	0B	91	10	32	54	76	98
	10	32	54	76	98							

#### TERMINAL RESPONSE: SEND SS 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	85	0B	91	10	32
	54	76	98	10	32	54	76	98			

# Expected Sequence 1.2 (SEND SS, call forward unconditional, all bearers, Return Error)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.1.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN ERROR) 1.1	[Return Error]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.2.1	

# RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

Error Code: Facility not supported

Coding:

BER-TLV 02 11 15

TERMINAL RESPONSE: SEND SS 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: SS Return Error Additional information: Error Code

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	02
_	34	15									

# Expected Sequence 1.3 (SEND SS, call forward unconditional, all bearers, Reject)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 1.1.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS REJECT) 1.1.	[Reject]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.3.1	

# RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from problem code):

Problem Code:

- General problem
- Unrecognized component

BER-TLV	80	01	00
	00	0.	00

TERMINAL RESPONSE: SEND SS 1.3.1

Logically:

Command details

Command number:

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: SS Return Error

Additional information: No specific cause can be given

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	02
	34	00									

# Expected Sequence 1.4 (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.4.1	
4	$ME \rightarrow USER$	Display "Call Forward"	
5	$ME \to SS$	REGISTER 1.2	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.2	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.4.1	

PROACTIVE COMMAND: SEND SS 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Call Forward"

SS String

TON: International

NPI: "ISDN / telephone numbering plan"

SS string: "\*\*21\*+01234567890123456789012345678901234567\*11#"

BER-TLV:	D0	32	81	03	01	11	00	82	02	81	83	85
	0C	43	61	6C	6C	20	46	6F	72	77	61	72
	64	89	19	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	09	21	43	65	87	09	21	43
	65	A7	11	FB								

#### **REGISTER 1.2**

Logically (only SS argument):

#### REGISTER SS ARGUMENT

RegisterSSArg

SS-Code

Call Forwarding Unconditional

TeleserviceCode

Telephony

Forwarded To Number

nature of address ind.: international

numbering plan ind.: ISDN/Telephony (E.164)

TBCD String: 01234567890123456789012345678901234567

#### Coding:

BER-TLV	30	1C	04	01	21	83	01	11	84	14	91	10
-	32	54	76	98	10	32	54	76	98	10	32	54
	76	98	10	32	54	76						

# RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from operation code):

# REGISTER SS RETURN RESULT

ForwardingInfo

SS-Code

- Call Forwarding Unconditional

ForwardFeatureList

ForwardingFeature

TeleserviceCode

- Telephony

SS-Status

- state ind .: operative

- provision ind.: provisioned

- registration ind.: registered

- activation ind.: active

ForwardedToNumber

- nature of address ind.: international

- numbering plan ind.: ISDN/Telephony (E.164)

- TBCD String: 0123456789012345678901234567

BER-TLV	0A	A0	23	04	01	21	30	1E	30	1C	83	01
·	11	84	01	07	84	14	91	10	32	54	76	98
	10	32	54	76	98	10	32	54	76	98	10	32
	54	76										

TERMINAL RESPONSE: SEND SS 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	27
	00	0A	A0	23	04	01	21	30	1E	30	1C
	83	01	11	84	01	07	84	14	91	10	32
	54	76	98	10	32	54	76	98	10	32	54
	76	98	10	32	54	76					

# Expected Sequence 1.5 (SEND SS, interrogate CLIR status, successful, alpha identifier limits)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND SS 1.5.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 1.5.1	
4	$ME \to USER$	Display "Even if the Fixed Dialling Number service is	
		enabled, the supplementary service control string	
		included in the SEND SS proactive command shall not	
		be checked against those of the FDN list. Upon	
		receiving this command, the ME shall deci"	
5	/ 00	REGISTER 1.3	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.3	[Successful]
7	$ME \to SIM$	TERMINAL RESPONSE: SEND SS 1.5.1	

PROACTIVE COMMAND: SEND SS 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Even if the Fixed Dialling Number service is enabled, the supplementary service

control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci"

SS String

TON: Undefined NPI: Undefined SS string: "\*#31#"

_											
D0	81	FD	81	03	01	11	00	82	02	81	83
85	81	EB	45	76	65	6E	20	69	66	20	74
68	65	20	46	69	78	65	64	20	44	69	61
6C	6C	69	6E	67	20	4E	75	6D	62	65	72
20	73	65	72	76	69	63	65	20	69	73	20
65	6E	61	62	6C	65	64	2C	20	74	68	65
20	73	75	70	70	6C	65	6D	65	6E	74	61
72	79	20	73	65	72	76	69	63	65	20	63
6F	6E	74	72	6F	6C	20	73	74	72	69	6E
67	20	69	6E	63	6C	75	64	65	64	20	69
6E	20	74	68	65	20	53	45	4E	44	20	53
53	20	70	72	6F	61	63	74	69	76	65	20
63	6F	6D	6D	61	6E	64	20	73	68	61	6C
6C	20	6E	6F	74	20	62	65	20	63	68	65
63	6B	65	64	20	61	67	61	69	6E	73	74
20	74	68	6F	73	65	20	6F	66	20	74	68
65	20	46	44	4E	20	6C	69	73	74	2E	20
55	70	6F	6E	20	72	65	63	65	69	76	69
6E	67	20	74	68	69	73	20	63	6F	6D	6D
61	6E	64	2C	20	74	68	65	20	4D	45	20
73	68	61	6C	6C	20	64	65	63	69	89	04
FF	BA	13	FB								
	68 6C 20 65 20 72 6F 67 6E 53 63 6C 63 20 65 55 6E 61 73	85 81 68 65 6C 6C 20 73 65 6E 20 73 72 79 6F 6E 67 20 63 6F 6C 20 63 6B 20 74 65 20 55 70 6E 67 61 6E 73 68	85 81 EB 68 65 20 6C 6C 69 20 73 65 65 6E 61 20 73 75 72 79 20 6F 6E 74 67 20 69 6E 20 74 53 20 70 63 6F 6D 6C 20 6E 63 6B 65 20 74 68 65 20 46 55 70 6F 6E 67 20 61 6E 64 73 68 61	85         81         EB         45           68         65         20         46           6C         6C         69         6E           20         73         65         72           65         6E         61         62           20         73         75         70           72         79         20         73           6F         6E         74         72           67         20         69         6E           6E         20         74         68           53         20         70         72           63         6F         6D         6D           6C         20         6E         6F           63         6B         65         64           20         74         68         6F           65         20         46         44           55         70         6F         6E           6E         67         20         74           61         6E         64         2C           73         68         61         6C	85         81         EB         45         76           68         65         20         46         69           6C         6C         69         6E         67           20         73         65         72         76           65         6E         61         62         6C           20         73         75         70         70           72         79         20         73         65           6F         6E         74         72         6F           67         20         69         6E         63           6E         20         74         68         65           53         20         70         72         6F           63         6F         6D         6D         61           6C         20         6E         6F         74           63         6B         65         64         20           20         74         68         6F         73           65         20         46         44         4E           55         70         6F         6E         20	85         81         EB         45         76         65           68         65         20         46         69         78           6C         6C         69         6E         67         20           20         73         65         72         76         69           65         6E         61         62         6C         65           20         73         75         70         70         6C           72         79         20         73         65         72           6F         6E         74         72         6F         6C           67         20         69         6E         63         6C           6E         20         74         68         65         20           53         20         70         72         6F         61           63         6F         6D         6D         61         6E           6C         20         6E         6F         74         20           63         6B         65         64         20         61           20         74         68         6F         <	85         81         EB         45         76         65         6E           68         65         20         46         69         78         65           6C         6C         69         6E         67         20         4E           20         73         65         72         76         69         63           65         6E         61         62         6C         65         64           20         73         75         70         70         6C         65           72         79         20         73         65         72         76           6F         6E         74         72         6F         6C         20           67         20         69         6E         63         6C         75           6E         20         74         68         65         20         53           53         20         70         72         6F         61         63           63         6F         6D         6D         61         6E         64           6C         20         6E         6F         74         20	85         81         EB         45         76         65         6E         20           68         65         20         46         69         78         65         64           6C         6C         69         6E         67         20         4E         75           20         73         65         72         76         69         63         65           65         6E         61         62         6C         65         64         2C           20         73         75         70         70         6C         65         6D           72         79         20         73         65         72         76         69           6F         6E         74         72         6F         6C         20         73           67         20         69         6E         63         6C         75         64           6E         20         74         68         65         20         53         45           53         20         70         72         6F         61         63         74           63         6F         6D	85         81         EB         45         76         65         6E         20         69           68         65         20         46         69         78         65         64         20           6C         6C         69         6E         67         20         4E         75         6D           20         73         65         72         76         69         63         65         20           65         6E         61         62         6C         65         64         2C         20           20         73         75         70         70         6C         65         6D         65           72         79         20         73         65         72         76         69         63           6F         6E         74         72         6F         6C         20         73         74           67         20         69         6E         63         6C         75         64         65           6E         20         74         68         65         20         53         45         4E           53         20	85         81         EB         45         76         65         6E         20         69         66           68         65         20         46         69         78         65         64         20         44           6C         6C         69         6E         67         20         4E         75         6D         62           20         73         65         72         76         69         63         65         20         69           65         6E         61         62         6C         65         64         2C         20         74           20         73         75         70         70         6C         65         6D         65         6E           72         79         20         73         65         72         76         69         63         65           6F         6E         74         72         6F         6C         20         73         74         72           67         20         69         6E         63         6C         75         64         65         64           6E         20         74	85         81         EB         45         76         65         6E         20         69         66         20           68         65         20         46         69         78         65         64         20         44         69           6C         6C         69         6E         67         20         4E         75         6D         62         65           20         73         65         72         76         69         63         65         20         69         73           65         6E         61         62         6C         65         64         2C         20         74         68           20         73         75         70         70         6C         65         6D         65         6E         74           72         79         20         73         65         72         76         69         63         65         20           6F         6E         74         72         6F         6C         20         73         74         72         69           67         20         69         6E         63         6C

#### **REGISTER 1.3**

Logically (only SS argument):

# INTERROGATE SS ARGUMENT

SS-Code

- Calling Line Id Restriction

Coding:

BER-TLV	30	03	04	01	12

# RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

# INTERROGATE SS RESULT

CliRestrictionInfo

SS-Status

- state ind.: operative

provision ind.: provisionedregistration ind.: registeredactivation ind.: not active

CliRestrictionOption

- Temporary Def Allowed

BER-TLV	0E	A4	06	04	01	06	0A	01	02

**TERMINAL RESPONSE: SEND SS 1.5.1** 

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Additional information

Operation Code: SS Code

Parameters: SS Return Result

Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	0A
·	00	0E	A4	06	04	01	06	0A	01	02	

# Expected Sequence 1.6 (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND SS 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND SS 1.6.1	
4		Should not give any information to the user on the fact that the ME is sending an SS request	
5		REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT) 1.1	[Successful]
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND SS 1.1.1	

PROACTIVE COMMAND: SEND SS 1.6.1

Logically:

Command details

Command number:

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: null data object

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

BER-TLV:	D0	1B	81	03	01	11	00	82	02	81	83	85
	00	89	0E	91	AA	12	0A	21	43	65	87	09
	21	43	65	87	B9							

#### 27.22.4.11.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1 to 1.6.

# 27.22.4.11.2 SEND SS (Icon support)

27.22.4.11.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.11.2.2 Conformance requirement

27.22.4.11.2.3 Test purpose

To verify that the ME displays the text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4 Method of test

27.22.4.11.2.4.1 Initial conditions

The ME is connected to the System Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

The elementary files are coded as Toolkit default.

#### 27.22.4.11.2.4.2 Procedure

# Expected Sequence 2.1A (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		SS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 2.1.1	[BASIC-ICON, self-explanatory]
4	$ME \rightarrow USER$	Display the icon without the alpha identifier	·
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	[Successful]
		RESULT) 1.1	-
7	$ME \to SIM$	TERMINAL RESPONSE: SEND SS 2.1.1A	[Command performed successfully]

#### PROACTIVE COMMAND: SEND SS 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Basic Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

Icon Identifier:

 $\begin{array}{ll} \hbox{Icon qualifier:} & \hbox{icon is self-explanatory} \\ \hbox{Icon Identifier:} & \hbox{record 1 in } EF_{(IMG)} \\ \end{array}$ 

# Coding:

BER-TLV:	D0	29	81	03	01	11	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	89
	0E	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	B9	9E	02	00	01					

TERMINAL RESPONSE: SEND SS 2.1.1A

Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully Additional information: Operation Code and SS Parameters

# Coding:

BER-TLV:	81	03	01	11	00	82	02	82	81	03	1E
	00	0A	A0	1A	04	01	21	30	15	30	13
	83	01	00	84	01	07	85	0B	91	10	32
	54	76	98	10	32	54	76	98			

# Expected Sequence 2.1B (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
		SS 2.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		SS 2.1.1B	requested icon could not be displayed]

TERMINAL RESPONSE: SEND SS 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Additional information: Operation Code and SS Parameters

Coding:

BER-TLV:

81	03	01	11	00	82	02	82	81	03	1E
04	0A	A0	1A	04	01	21	30	15	30	13
83	01	00	84	01	07	85	0B	91	10	32
54	76	98	10	32	54	76	98			

# Expected Sequence 2.2A (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		SS 2.2.1	
4	$ME \rightarrow USER$	Display the icon	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SS 2.1.1A	

PROACTIVE COMMAND: SEND SS 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Colour Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

Icon Identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 2 in } EF_{(IMG)} \\ \end{array}$ 

BER-TLV:	D0	2A	81	03	01	11	00	82	02	81	83	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	89	0E	91	AA	12	0A	21	43	65	87	09	21
	43	65	87	B9	9E	02	00	02				

# Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		SS 2.2.1	
4	$ME \rightarrow USER$	Display "Colour Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		SS 2.1.1B	could not be displayed]

# Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		SS 2.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" and the icon	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		SS 2.1.1A	

### PROACTIVE COMMAND: SEND SS 2.3.1

# Logically:

Command details

Command number: 1

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Text: "Basic Icon"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

BER-TLV:	D0	29	81	03	01	11	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	89
	0E	91	AA	12	0A	21	43	65	87	09	21	43
	65	87	B9	9E	02	01	01					

# Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		SS 2.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	/ 00	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		SS 2.1.1B	could not be displayed]

# Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

	Step	Direction	MESSAGE / Action	Comments
	1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	
			SEND SS 2.4.1	
	2	$ME \to SIM$	FETCH	
	3	$SIM \to ME$	PROACTIVE COMMAND: SEND SS 2.4.1	[BASIC-ICON, non self-explanatory]
L	4	$ME \to SIM$	TERMINAL RESPONSE: SEND SS 2.4.1	[Command data not understood by ME]

#### PROACTIVE COMMAND: SEND SS 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

BER-TLV:	D0	1D	81	03	01	11	00	82	02	81	83	89	ı
	0E	91	AA	12	0A	21	43	65	87	09	21	43	i
	65	87	B9	9E	02	01	01						1

TERMINAL RESPONSE: SEND SS 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

	BER-TLV:	81	03	01	11	00	82	02	82	81	83	01	32
--	----------	----	----	----	----	----	----	----	----	----	----	----	----

#### 27.22.4.11.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

# 27.22.4.11.3 SEND SS (UCS2 support)

27.22.4.11.3.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.11.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in: ISO/IEC 10646 [17].

#### 27.22.4.11.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.11.3.4 Method of test

27.22.4.11.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.11.3.4.2 Procedure

# Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND SS 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		SS 3.1.1	
4	$ME \rightarrow USER$	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	[Successful]
		RETURN RESULT) 1.1	
7	$ME \to SIM$	TERMINAL RESPÓNSE: SEND	[Command performed successfully]
		SS 1.1.1	

#### PROACTIVE COMMAND: SEND SS 3.1.1

# Logically:

Command details

Command number:

Command type: SEND SS Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)

Text: "ЗДРАВСТВУЙТЕ"

SS String

TON: International

NPI: "ISDN / telephone numbering plan" SS string: "\*\*21\*+01234567890123456789#"

# Coding:

BER-TLV:	D0	34	81	03	01	11	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	89	0E	91	AA	12	0A	21	43	65	87
	09	21	43	65	87	B9						

# 27.22.4.11.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

# 27.22.4.12 SEND USSD

# 27.22.4.12.1 SEND USSD (normal)

# 27.22.4.12.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.12.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send USSD facility as defined in:

- 3GPP TS 11.14 [15] clause 6.1, clause 6.4.12, clause 6.6.11, clause 12.12.7, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.17, clause 12.31 and clause 6.5.4.
- 3GPP TS 03.38 [7] clause 5.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in: ISO/IEC 10646 [17].

#### 27.22.4.12.1.3 Test purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

#### 27.22.4.12.1.4 Method of test

#### 27.22.4.12.1.4.1 Initial conditions

The ME is connected to the System Simulator and the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.12.1.4.2 Procedure

### Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		USSD 1.1.1	
4	$ME \to USER$	Display "7-bit USSD"	
5	ME  o SS	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 1.1	
7	$ME \to SIM$	TERMINAL RESPÓNSE: SEND	
		USSD 1.1.1	

# PROACTIVE COMMAND: SEND USSD 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "7-bit USSD"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

BER-TLV:	D0	50	81	03	01	12	00	82	02	81	83	85
	0A	37	2D	62	69	74	20	55	53	53	44	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60		

#### **REGISTER 1.1**

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

#### Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	B3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

# RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "USSD string received from SS"

# Coding:

BER-TLV	30	1E	04	01	00	04	19	D5	E9	94	80	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

# TERMINAL RESPONSE: SEND USSD 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	80	9A	D3	E5
	69	F7	19	24	2F	8F	СВ	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

# Expected Sequence 1.2 (SEND USSD, 8-bit data, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		USSD 1.2.1	
4	$ME \rightarrow USER$	Display "8-bit USSD"	
5	$ME \to SS$	REGISTER 1.2	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 1.2	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	
		USSD 1.2.1	

# PROACTIVE COMMAND: SEND USSD 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "8-bit USSD"

**USSD String** 

Data coding scheme: Uncompressed, no message class meaning, 8-bit data

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

# Coding:

BER-TLV:	D0	58	81	03	01	12	00	82	02	81	83	85
'-	0A	38	2D	62	69	74	20	55	53	53	44	8A
	41	44	41	42	43	44	45	46	47	48	49	4A
	4B	4C	4D	4E	4F	50	51	52	53	54	55	56
	57	58	59	5A	2D	61	62	63	64	65	66	67
	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73
	74	75	76	77	78	79	7A	2D	31	32	33	34
	35	36	37	38	39	30						

# **REGISTER 1.2**

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT

USSD-Data Coding Scheme:

- Uncompressed, no message class meaning, 8-bit data

USSD string:

- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

BER-TLV	30	45	04	01	44	04	40	41	42	43	44	45
	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51
	52	53	54	55	56	57	58	59	5A	2D	61	62
	63	64	65	66	67	68	69	6A	6B	6C	6D	6E
	6F	70	71	72	73	74	75	76	77	78	79	7A
	2D	31	32	33	34	35	36	37	38	39	30	

# RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- Uncompressed, no message class meaning, 8-bit data

USSD string:

- "USSD string received from SS"

#### Coding:

BER-TLV	30	21	04	01	04	04	1C	55	53	53	44	20
	73	74	72	69	6E	67	20	72	65	63	65	69
	76	65	64	20	66	72	6F	6D	20	53	53	

TERMINAL RESPONSE: SEND USSD 1.2.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: Uncompressed, no message class meaning, 8-bit data

"USSD string received from SS" String:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1D	04	55	53	53	44	20	73	74
	72	69	6E	67	20	72	65	63	65	69	76
	65	64	20	66	72	6F	6D	20	53	53	

# Expected Sequence 1.3 (SEND USSD, UCS2 data, successful)

Ī	Step	Direction	MESSAGE / Action	Comments
ſ	1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
			USSD 1.3.1	
	2	$ME \rightarrow SIM$	FETCH	
	3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.3.1	
	4	$ME \to USER$	Display "UCS2 USSD"	
	5	$ME \to SS$	REGISTER 1.3	
	6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
			1.3	
	7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.3.1	

PROACTIVE COMMAND: SEND USSD 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "UCS2 USSD"

**USSD String** 

Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string: "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV:	D0	2F	81	03	01	12	00	82	02	81	83	85
_	09	55	43	53	32	20	55	53	53	44	8A	19
	48	04	17	04	14	04	20	04	10	04	12	04
	21	04	22	04	12	04	23	04	19	04	22	04
	15											

#### **REGISTER 1.3**

Logically (only USSD argument):

ProcessUnstructuredSS-Request ARGUMENT

USSD-Data Coding Scheme:

- Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string:

- "ЗДРАВСТВУЙТЕ" ("Hello" in Russian)

Coding:

BER-TLV	30	1D	04	01	48	04	18	04	17	04	14	04
	20	04	10	04	12	04	21	04	22	04	12	04
	23	04	19	04	22	04	15					

# RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- Uncompressed, no message class meaning, UCS2 (16 bit)

USSD string:

- "USSD string received from SS"

#### Coding:

BER-TLV	30	3D	04	01	08	04	38	00	55	00	53	00
_	53	00	44	00	20	00	73	00	74	00	72	00
	69	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64	00
	20	00	66	00	72	00	6F	00	6D	00	20	00
	53	00	53									

TERMINAL RESPONSE: SEND USSD 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Text String

Data coding scheme: Uncompressed, no message class meaning, UCS2 (16 bit)

String: "USSD string received from SS"

#### Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	39	08	00	55	00	53	00	53	00
	44	00	20	00	73	00	74	00	72	00	69
	00	6E	00	67	00	20	00	72	00	65	00
	63	00	65	00	69	00	76	00	65	00	64
	00	20	00	66	00	72	00	6F	00	6D	00
	20	00	53	00	53						

# Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	$ME \rightarrow USER$	Display "7-bit USSD"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN ERROR) 1.1	Return Error
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.4.1	

# RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

ProcessUnstructuredSS-Request RETURN ERROR

Return Error code:

- Unknown alphabet

BER-TLV	02	01	47
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TERMINAL RESPONSE: SEND USSD 1.4.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier:

Device identities

Source device: ME Destination device: SIM

Result

General Result: USSD Return Error Additional information: "Unknown alphabet"

"00"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
	37	47									

# Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND USSD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.1.1	
4	$ME \rightarrow USER$	Display "7-bit USSD"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS REJECT) 1.1	Reject
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.5.1	

# RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

ProcessUnstructuredSS-Request REJECT

Invoke Problem code:

- Mistyped parameter

Coding:

TERMINAL RESPONSE: SEND <u>U</u>SSD 1.5.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM Result

General Result: USSD Return Error

Additional information: "No specific cause can be given"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	02
_	37	00									

# Expected Sequence 1.6 (SEND USSD, 256 octets, 7-bit data, successful, long alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.6.1	
4	$ME \rightarrow USER$	Display "once a RELEASE COMPLETE	
		message containing the USSD Return Result	
		message not containing an error has been	
		received from the network, the ME shall	
		inform the SIM that the command has"	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	["USSD string received from SS"]
		RESULT) 1.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "once a RELEASE COMPLETE message containing the USSD Return Result

message not containing an error has been received from the network, the ME shall

inform the SIM that the command has"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

# Coding:

BER-TLV:	D0	81	FD	81	03	01	12	00	82	02	81	83
	85	81	В6	6F	6E	63	65	20	61	20	52	45
	4C	45	41	53	45	20	43	4F	4D	50	4C	45
	54	45	20	6D	65	73	73	61	67	65	20	63
	6F	6E	74	61	69	6E	69	6E	67	20	74	68
	65	20	55	53	53	44	20	52	65	74	75	72
	6E	20	52	65	73	75	6C	74	20	6D	65	73
	73	61	67	65	20	6E	6F	74	20	63	6F	6E
	74	61	69	6E	69	6E	67	20	61	6E	20	65
	72	72	6F	72	20	68	61	73	20	62	65	65
	6E	20	72	65	63	65	69	76	65	64	20	66
	72	6F	6D	20	74	68	65	20	6E	65	74	77
	6F	72	6B	2C	20	74	68	65	20	4D	45	20
	73	68	61	6C	6C	20	69	6E	66	6F	72	6D
	20	74	68	65	20	53	49	4D	20	74	68	61
	74	20	74	68	65	20	63	6F	6D	6D	61	6E
	64	20	68	61	73	8A	39	F0	41	E1	90	58
	34	1E	91	49	E5	92	D9	74	3E	A1	51	E9
	94	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB
	E6	33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F
	D3	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD
	76	C3	E5	60								

# Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 1.7.1	
4	$ME \rightarrow USER$	Optionally display an informative message	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
		1.1	-
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.7.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

## Coding:

BER-TLV:	D0	44	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60		

# Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 1.8.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND USSD 1.8.1	
4	$ME \rightarrow USER$	the ME should not give any information to the	
		user on the fact that the ME is sending a USSD	
		request	
5	$ME \to SS$	REGISTER 1.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN RESULT)	["USSD string received from SS"]
		1.1	
7	$ME \to SIM$	TERMINAL RESPONSE: SEND USSD 1.1.1	

PROACTIVE COMMAND: SEND USSD 1.8.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: ""

USSD String

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

## Coding:

BER-TLV:	D0	46	81	03	01	12	00	82	02	81	83	85
	00	8A	39	F0	41	E1	90	58	34	1E	91	49
	E5	92	D9	74	3E	A1	51	E9	94	5A	B5	5E
	B1	59	6D	2B	2C	1E	93	CB	E6	33	3A	AD
	5E	В3	DB	EE	37	3C	2E	9F	D3	EB	F6	3B
	3E	AF	6F	C5	64	33	5A	CD	76	C3	E5	60

## 27.22.4.12.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 - 1.8.

27.22.4.12.2 SEND USSD (Icon support)

27.22.4.12.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.12.2.2 Conformance requirement

27.22.4.12.2.3 Test purpose

To verify that the ME displays the text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test

27.22.4.12.2.4.1 Initial conditions

The ME is connected to the System Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

The elementary files are coded as Toolkit default.

#### 27.22.4.12.2.4.2 Procedure

# Expected Sequence 2.1A (SEND USSD, 7-bit data, successful, basic icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 2.1.1	[BASIC-ICON, self-explanatory]
4	$ME \rightarrow USER$	Display BASIC ICON	
5	$ME \to SS$	REGISTER 2.1	
6	SS  o ME	RELEASE COMPLETE (SS RETURN	["USSD string received from SS"]
		RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 2.1.1A	[Command performed successfully]

#### PROACTIVE COMMAND: SEND USSD 2.1.1

## Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Basic Icon"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

Icon Identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon Identifier:} & \mbox{record 1 in } EF_{(IMG)} \\ \end{array}$ 

## Coding:

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
-	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	B3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	00	01										

#### **REGISTER 2.1**

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

## Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

## RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- "USSD string received from SS"

## Coding:

BER-TLV	30	1E	04	01	F0	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				_

TERMINAL RESPONSE: SEND USSD 2.1.1A

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

**Text String** 

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
-	00	8D	1A	00	D5	E9	94	80	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

# Expected Sequence 2.1B (SEND USSD, 7-bit data, successful, basic icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
		USSD 2.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
5	$ME \to SS$	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		USSD 2.1.1B	could not be displayed]

TERMINAL RESPONSE: SEND USSD 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

**Text String** 

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	04	8D	1A	00	D5	E9	94	80	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	СВ	DF	6D	D0	74	0A				

## Expected Sequence 2.2 (SEND USSD, 7-bit data, successful, colour icon self explanatory)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON, self-explanatory]
		USSD 2.2.1	
4	$ME \rightarrow USER$	Display COLOUR-ICON	
		or	
		May give information to user	
		concerning what is happening	
5	$ME \rightarrow SS$	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$		[Command performed successfully]
		USSD 2.1.1A	or
		or	[Command performed but requested icon
		TERMINAL RESPONSE: SEND	could not be displayed]
		USSD 2.1.1B	

PROACTIVE COMMAND: SEND USSD 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Color Icon"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

Icon Identifier:

Icon qualifier: icon is self-explanatory Icon Identifier: record 2 in  $EF_{(IMG)}$ 

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
	0A	43	6F	6C	6F	72	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	00	02										

# Expected Sequence 2.3A (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.3.1	
4	$ME \rightarrow USER$	Display "Basic Icon" and BASIC-	
		ICON	
_		DECICTED 6.4	
5	/ 00	REGISTER 2.1	
6	$SS \to ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		USSD 2.1.1A	

PROACTIVE COMMAND: SEND USSD 2.3.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Basic Icon"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

1234567890"

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

BER-TLV:	D0	54	81	03	01	12	00	82	02	81	83	85
'-	0A	42	61	73	69	63	20	49	63	6F	6E	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	01	01										

# Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.3.1	
4	ME  o	Display "Basic Icon" without the	
	USER	icon	
5	$ME \rightarrow SS$	REGISTER 2.1	
6	$SS \rightarrow ME$	RELEASE COMPLETE (SS	["USSD string received from SS"]
		RETURN RESULT) 2.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed but requested icon
		USSD 2.1.1B	could not be displayed]

# Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SEND USSD 2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, non self-explanatory]
		USSD 2.4.1	·
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command data not understood by ME]
		USSD 2.4.1	

PROACTIVE COMMAND: SEND USSD 2.4.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD string: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

Icon Identifier

Icon qualifier: icon is non self-explanatory

Icon Identifier: record 1 in  $EF_{(IMG)}$ 

BER-TLV:	D0	48	81	03	01	12	00	82	02	81	83	8A
	39	F0	41	E1	90	58	34	1E	91	49	E5	92
	D9	74	3E	A1	51	E9	94	5A	B5	5E	B1	59
	6D	2B	2C	1E	93	CB	E6	33	3A	AD	5E	В3
	DB	EE	37	3C	2E	9F	D3	EB	F6	3B	3E	AF
	6F	C5	64	33	5A	CD	76	C3	E5	60	9E	02
	01	01										

TERMINAL RESPONSE: SEND USSD 2.4.1

Logically:

Command details

Command number:

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01	32
	<b>.</b>		• •	. –		~-		~-	• .		• .	

#### 27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 - 2.4.

## 27.22.4.12.3 SEND USSD (UCS2 support)

27.22.4.12.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.12.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

• ISO/IEC 10646 [17].

## 27.22.4.12.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.12.3.4 Method of test

27.22.4.12.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

## 27.22.4.12.3.4.2 Procedure

## Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		USSD 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND USSD 3.1.1	
4	$ME \rightarrow USER$	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$ME \to SS$	REGISTER 3.1	
6	$SS \to ME$	RELEASE COMPLETE (SS RETURN	[Successful]
		RESULT) 3.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND USSD 3.1.1	[Command performed successfully]

#### PROACTIVE COMMAND: SEND USSD 3.1.1

## Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)

Text: "ЗДРАВСТВУЙТЕ"

**USSD String** 

Data coding scheme: 7-bit default, no message class

USSD String: "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-

## Coding:

BER-TLV:	D0	5F	81	03	01	12	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	8A	39	F0	41	E1	90	58	34	1E	91
	49	E5	92	D9	74	3E	A1	51	E9	94	5A	B5
	5E	B1	59	6D	2B	2C	1E	93	CB	E6	33	3A
	AD	5E	В3	DB	EE	37	3C	2E	9F	D3	EB	F6
	3B	3E	AF	6F	C5	64	33	5A	CD	76	C3	E5
	60											

## **REGISTER 3.1**

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

**USSD String:** 

- "ABCDEFGHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

## Coding:

BER-TLV	30	3D	04	01	F0	04	38	41	E1	90	58	34
	1E	91	49	E5	92	D9	74	3E	A1	51	E9	94
	5A	B5	5E	B1	59	6D	2B	2C	1E	93	CB	E6
	33	3A	AD	5E	В3	DB	EE	37	3C	2E	9F	D3
	EB	F6	3B	3E	AF	6F	C5	64	33	5A	CD	76
	C3	E5	60									

# RELEASE COMPLETE (SS RETURN RESULT) 3.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD String:

- "USSD string received from SS"

#### Coding:

BER-TLV	30	1E	04	01	00	04	19	D5	E9	94	08	9A
	D3	E5	69	F7	19	24	2F	8F	CB	69	7B	99
	0C	32	CB	DF	6D	D0	74	0A				

## TERMINAL RESPONSE: SEND USSD 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND USSD

Command qualifier:

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

"00"

Text String

Data coding scheme: 7-bit default, no message class String: "USSD string received from SS"

## Coding:

BER-TLV:	81	03	01	12	00	82	02	82	81	83	01
	00	8D	1A	00	D5	E9	94	08	9A	D3	E5
	69	F7	19	24	2F	8F	CB	69	7B	99	0C
	32	CB	DF	6D	D0	74	0A				

## 27.22.4.12.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

## 27.22.4.13 SET UP CALL

## 27.22.4.13.1 SET UP CALL (normal)

## 27.22.4.13.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.13.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Call facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.13, clause 6.6.12, clause 12.6, clause 12.7, clause 12.12, clause 12.12.3 and clause 5.2.

## 27.22.4.13.1.3 Test purpose

To verify that the ME accepts the Proactive Command - Set Up Call, displays the alpha identifier to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

## 27.22.4.13.1.4 Method of test

## 27.22.4.13.1.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the system simulator.

## 27.22.4.13.1.4.2 Procedure

## Expected Sequence 1.1 (SET UP CALL, call confirmed by the user and connected)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET	
		UP CALL 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL	
		1.1.1	
4	$ME \to USER$	ME displays "Not busy" during user	
		confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \to ME$	The ME receives the CONNECT message	
		from the system simulator.	
8	$ME \to SIM$		[Command performed successfully]
		The ME shall not update EF LND with the	
		called party address.	
9	$USER \to ME$	The user ends the call after 5 s.	
		The ME returns to idle mode.	

# PROACTIVE COMMAND: SET UP CALL 1.1.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Not busy"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

## Coding:

BER-TLV:	D0	1E	81	03	01	10	00	82	02	81	83	85
	80	4E	6F	74	20	62	75	73	79	86	09	91
	10	32	04	21	43	65	1C	2C				

#### TERMINAL RESPONSE: SET UP CALL 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83	01	00	
--	----	----	--

## Expected Sequence 1.2 (SET UP CALL, call rejected by the user)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		CALL 1.1.1	
4	$ME \to USER$	ME displays "Not busy" during the	
		user confirmation phase	
5	$USER \to ME$	The user rejects the set up call	[user rejects the call]
6	$ME \to SIM$	TERMINAL RESPONSE 1.2.1	[User did not accept call set-up request]
7	$ME \rightarrow USER$	The ME returns in idle mode.	

# TERMINAL RESPONSE: SET UP CALL 1.2.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: User did not accept the proactive command

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	22
		00			00	02	02	02		00		

## **Expected Sequence 1.3 (SET UP CALL, redial)**

The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy".

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.3.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[only if not currently busy on another call with
		CALL 1.3.1	redial]
4	$ME \to USER$	ME displays "Not busy with redial"	
		during the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	ME attempts to set up a call to	[redial mechanism]
		"+012340123456p1p2" at least	
		twice	
7	$ME \to SIM$	TERMINAL RESPONSE 1.3.1	[network currently unable to process
			command]
8	$ME \to USER$	The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Not busy with redial"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	2A	81	03	01	10	01	82	02	81	83	85
	14	4E	6F	74	20	62	75	73	79	20	77	69
	74	68	20	72	65	64	69	61	6C	86	09	91
	10	32	04	21	43	65	1C	2C				

TERMINAL RESPONSE: SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME Destination device: SIM Result

General Result: network currently unable to process command

Additional Information: User Busy

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	02	21
	91											

# Expected Sequence 1.4 (SET UP CALL, putting all other calls on hold, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET	
		UP CALL 1.4.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$		[putting all other calls on hold]
		1.4.1	
4	$ME \to USER$	ME displays "On hold" during the user	
		confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	The active call is put on hold	
7	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
8	$SS \to ME$	The ME receives the CONNECT message	
_		from the system simulator.	
9	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.4.1	[Command performed successfully]
40			
10	USER $\rightarrow$ ME	The user ends the call after 5 s.	
		The ME retrieves the previous call	

## PROACTIVE COMMAND: SET UP CALL 1.4.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "On hold"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	1D	81	03	01	10	02	82	02	81	83	85
	07	4F	6E	20	68	6F	6C	64	86	09	91	10
	32	04	21	43	65	1C	2C					

TERMINAL RESPONSE: SET UP CALL 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:   81   03   01   10   02   82   02   82   81   83   01
---

## Expected Sequence 1.5 (SET UP CALL, disconnecting all other calls, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET	
		UP CALL 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL	[disconnecting all other calls]
		1.5.1	
4	$ME \rightarrow USER$	ME displays "Disconnect" during the user	
		confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	The ME disconnects the active call	
7	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
8	$SS \to ME$	The ME receives the CONNECT message	
		from the system simulator.	
9	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.5.1	[Command performed successfully]
10	$USER \to ME$	The user ends the call after 5 s.	

## PROACTIVE COMMAND: SET UP CALL 1.5.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: disconnecting all other calls

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Disconnect"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

BER-TLV:	D0	20	81	03	01	10	04	82	02	81	83	85
	0A	44	69	73	63	6F	6E	6E	65	63	74	86
	09	91	10	32	04	21	43	65	1C	2C		

# TERMINAL RESPONSE: SET UP CALL 1.5.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03	01 10	04 82	02 82	81	83	01	00	
----------------	-------	-------	-------	----	----	----	----	--

## Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[only if not currently busy on another call]
		CALL 1.1.1	
4	$ME \to SIM$	TERMINAL RESPONSE 1.6.1	[ME currently unable to process command]

#### TERMINAL RESPONSE: SET UP CALL 1.6.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional Information: ME currently busy on call

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	02	20
	02											

## Expected Sequence 1.7 (SET UP CALL, putting all other calls on hold, call hold is not allowed)

ME is busy on a call. The system simulator shall be configured to not allow Call Hold.

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.4.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[putting all other calls on hold]
		CALL 1.4.1	
4	$ME \to USER$	ME displays "On hold" during the	
		user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SIM$	TERMINAL RESPONSE 1.7.1	[Network currently unable to process command]

TERMINAL RESPONSE: SET UP CALL 1.7.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: putting all other calls on hold

Device identities

Source device: ME Destination device: SIM

Result

General Result: Network currently unable to process command

Additional Information: No specific cause can be given

Coding:

BER-TLV:	81	03	01	10	02	82	02	82	81	83	02	21
	00											

## **Expected Sequence 1.8 (SET UP CALL, Capability configuration)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.8.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Capability configuration parameters: full rate
		CALL 1.8.1	support]
4	$ME \to USER$	ME displays "Capability config"	
		during the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456p1p2" using the	
		capability configuration parameters	
		supplied by SIM	
7	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	10 1 1 1 1 1
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.8.1	[Command performed successfully]
9	LICED . ME	The user ands the call	
9	$USER \to ME$	The user ends the call	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.8.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Capability config"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Capability configuration parameters

Information transfer cap: full rate support only MS

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
_	11	43	61	70	61	62	69	6C	69	74	79	20
	63	6F	6E	66	69	67	86	09	91	10	32	04
	21	43	65	1C	2C	87	02	01	20			

TERMINAL RESPONSE: SET UP CALL 1.8.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
D = 1 \ 1 = \ 1		00			00		~_				<b>.</b>	00

## Expected Sequence 1.9 (SET UP CALL, max dialling number string, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.9.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE SET UP CALL 1.9.1	[dialling number string, no alpha identifier]
4	$USER \to ME$	The user confirms the set up call	[user confirmation]
5	$ME \rightarrow SS$	The ME attempts to set up a call to	
		"012345678901234567890123456	
		789*#*#*#*#0123456789012345	
		67890123456789*#*#*#*#"	
6	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.9.1	[Command performed successfully]
8	USER $\rightarrow$ ME	The user ends the call	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.9.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
Destination device: Network

Address

TON: International

NPI: ISDN / telephone numbering plan

789\*#\*#\*#\*#\*#"

## Coding:

BER-TLV:	D0	34	81	03	01	10	01	82	02	81	83	86
	29	91	10	32	54	76	98	10	32	54	76	98
	10	32	54	76	98	BA	BA	BA	BA	BA	10	32
	54	76	98	10	32	54	76	98	10	32	54	76
	98	BA	BA	BA	BA	BA						

TERMINAL RESPONSE: SET UP CALL 1.9.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	01	00
DLIX-ILV.	01	03	O I	10	O I	02	02	02	01	03	01	00

## Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING: SET UP	
		CALL 1.10.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL	[ alpha identifier]
		1.10.1	
4	$ME \to USER$	ME displays "Three types are defined: - set up	
		a call, but only if not currently busy on another	
		call; - set up a call, putting all other calls (if any)	
		on hold; - set up a call, disconnecting all other	
		calls (if any) first. For each of these types, "	
_		during the user confirmation phase.	
5		<u>'</u>	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+01"	
7	$SS \to ME$	The ME receives the CONNECT message from	
		the system simulator.	
8		TERMINAL RESPONSE 1.10.1	[Command performed successfully]
9	USER $\rightarrow$ ME	The user ends the call	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.10.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Three types are defined: - set up a call, but only if not currently busy on another

call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, "

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string: "01"

Coding:

BER-TLV:	D0	81	FD	81	03	01	10	01	82	02	81	83
	85	81	ED	54	68	72	65	65	20	74	79	70
	65	73	20	61	72	65	20	64	65	66	69	6E
	65	64	3A	20	2D	20	73	65	74	20	75	70
	20	61	20	63	61	6C	6C	2C	20	62	75	74
	20	6F	6E	6C	79	20	69	66	20	6E	6F	74
	20	63	75	72	72	65	6E	74	6C	79	20	62
	75	73	79	20	6F	6E	20	61	6E	6F	74	68
	65	72	20	63	61	6C	6C	3B	20	2D	20	73
	65	74	20	75	70	20	61	20	63	61	6C	6C
	2C	20	70	75	74	74	69	6E	67	20	61	6C
	6C	20	6F	74	68	65	72	20	63	61	6C	6C
	73	20	28	69	66	20	61	6E	79	29	20	6F
	6E	20	68	6F	6C	64	3B	20	2D	20	73	65
	74	20	75	70	20	61	20	63	61	6C	6C	2C
	20	64	69	73	63	6F	6E	6E	65	63	74	69
	6E	67	20	61	6C	6C	20	6F	74	68	65	72
	20	63	61	6C	6C	73	20	28	69	66	20	61
	6E	79	29	20	66	69	72	73	74	2E	20	46
	6F	72	20	65	61	63	68	20	6F	66	20	74
	68	65	73	65	20	74	79	70	65	73	2C	20
	86	02	91	10								
								•				

TERMINAL RESPONSE: SET UP CALL 1.10.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	10	01	82	02	82	81	83	01	00	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

# Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.11.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[set up a call with called party subaddress]
		CALL 1.11.1	
4	$ME \rightarrow USER$	ME displays "Called party" during	
		the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456p1p2" with the	
		called party subaddress	
_		information	
7	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.11.1A	[Command performed successfully]
9	USER $\rightarrow$ ME	The user ends the call	
		The ME returns in idle mode.	

# Expected Sequence 1.11B (SET UP CALL, Called party subaddress, ME not supporting the called party subaddress)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.11.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[set up a call with called party subaddress]
		CALL 1.11.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE 1.11.1B	[beyond ME's capabilities]

## PROACTIVE COMMAND: SET UP CALL 1.11.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Called party"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string: "012340123456p1p2"

Called party subaddress

Type of subaddress: NSAP (X.213 / ISO 8348 AD2) Odd / even indicator: even number of address signals Subaddress information: AFI, 95, 95, 95, 95, 95

BER-TLV:	D0	2B	81	03	01	10	00	82	02	81	83	85
	0C	43	61	6C	6C	65	64	20	70	61	72	74
	79	86	09	91	10	32	04	21	43	65	1C	2C
	88	07	80	50	95	95	95	95	95			

TERMINAL RESPONSE: SET UP CALL 1.11.1A

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

#### TERMINAL RESPONSE: SET UP CALL 1.11.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: if not busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Beyond ME's capabilities

Coding:

F F F	- 4	2	•	•	•	2	00	S	•	S	•	00
BER-TLV:	I 81	1 113	N1	I 10	00			l 82	I 81		I 01	30
				1 10		1 02	02			1 00		

## Expected Sequence 1.12 (SET UP CALL, maximum duration for the redial mechanism)

The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy".

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.12.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[only if not currently busy on another call with
		CALL 1.12.1	redial]
4	$ME \to USER$	ME displays "Duration" during the	
		user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirms the call]
6	$ME \to SS$	ME attempts to set up a call to	[redial mechanism with maximum duration of
		"+012340123456p1p2" . It stops its	10 seconds]]
		attempts after 10 seconds.	
7	$ME \to SIM$	TERMINAL RESPONSE 1.12.1	[network currently unable to process
			command]
8	$ME \to USER$	The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 1.12.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Duration"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string: "012340123456p1p2"

Duration

Unit: Seconds Interval: 10

Coding:

BER-TLV:	D0	22	81	03	01	10	01	82	02	81	83	85
	80	44	75	72	61	74	69	6F	6E	86	09	91
	10	32	04	21	43	65	1C	2C	84	02	01	0A

#### TERMINAL RESPONSE: SET UP CALL 1.12.1

## Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call with redial

Device identities

Source device: ME Destination device: SIM

Result

General Result: network currently unable to process command

Additional Information: User Busy

Coding:

BER-TLV:	81	03	01	10	01	82	02	82	81	83	02	21
	91											

#### 27.22.4.13.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12.

## 27.22.4.13.2 SET UP CALL (second alpha identifier)

27.22.4.13.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.2.2 Conformance requirement

Same as clause 27.22.4.13.2.1.

## 27.22.4.13.2.3 Test purpose

To verify that the ME accepts a Proactive Command - Set Up Call, displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.2.4 Method of test

27.22.4.13.2.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

## 27.22.4.13.2.4.2 Procedure

## Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	
		SET UP CALL 2.1.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		CALL 2.1.1	
4	$ME \to USER$	ME displays "CONFIRMATION" during	
		the user confirmation phase	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	[second alpha identifier]
		"+012340123456p1p2".	
		The ME displays "CALL" if the ME	
		supports 2 <sup>nd</sup> alpha identifier or otherwise	
		"CONFIRMATION"	
7	$SS \to ME$	The ME receives the CONNECT	
_		message from the system simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 2.1.1	[Command performed successfully]
		The ME shall not update EF LND with	
		the called party address.	
9	USER $\rightarrow$ ME	The user ends the call after 5 s.	
		The ME returns in idle mode.	

## PROACTIVE COMMAND: SET UP CALL 2.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "CONFIRMATION"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Alpha Identifier (call set up phase): "CALL"

BER-TLV:	D0	28	81	03	01	10	00	82	02	81	83	85
	0C	43	4F	4E	46	49	52	4D	41	54	49	4F
	4E	86	09	91	10	32	04	21	43	65	1C	2C
	85	04	43	41	4C	4C						

TERMINAL RESPONSE: SET UP CALL 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
D_:: v .		00	<b>.</b>		00	_ <del>_</del>			, o.			

## 27.22.4.13.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.13.3 SET UP CALL (display of icons)

27.22.4.13.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.13.3.2 Conformance requirement

27.22.4.13.3.3 Test purpose

To verify that the ME accepts a Proactive Set Up Call , displays the message or icon to the user ,attempts to set up a call to the address, returns the result in the TERMINAL response.

27.22.4.13.3.4 Method of test

27.22.4.13.3.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

## 27.22.4.13.3.4.2 Procedure

# Expected Sequence 3.1A (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, successful)

Direction	MESSAGE / Action	Comments
$SIM \to ME$	PROACTIVE COMMAND	
	PENDING: SET UP CALL 3.1.1	
$ME \to SIM$	FETCH	
$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		displayed in addition of the first alpha
		identifier
$ME \rightarrow USER$		
	•	
	· ·	[user confirmation]
ME→SS		
$SS \rightarrow ME$		
$ME \rightarrow SIM$	TERMINAL RESPONSE 3.1.1A	[Command performed successfully]
LISER → ME	The user ends the call after 5 s	
OOLIN - IVIL		
	$\begin{array}{c} \text{SIM} \rightarrow \text{ME} \\ \text{ME} \rightarrow \text{SIM} \\ \text{SIM} \rightarrow \text{ME} \\ \\ \text{ME} \rightarrow \text{USER} \\ \\ \text{USER} \rightarrow \text{ME} \\ \text{ME} \rightarrow \text{SS} \\ \\ \text{SS} \rightarrow \text{ME} \\ \\ \\ \text{ME} \rightarrow \text{SIM} \\ \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### PROACTIVE COMMAND: SET UP CALL 3.1.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.1.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

## Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	31	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	01										

## TERMINAL RESPONSE: SET UP CALL 3.1.1A

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	l 81	03	01	10	00	82	1 02	82	81	83	l 01	00
DEIX IEV.	0.	00	0.	10	00	02	02	02	٥.	00	01	00

# Expected Sequence 3.1B (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.1.1	displayed in addition of the first alpha identifier
4	ME → USER	ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to "+012340123456p1p2"	
7	$SS \to ME$	The ME receives the CONNECT message from the system simulator.	
8	ME → SIM	TERMINAL RESPONSE 3.1.1B	[Command performed successfully, but requested icon could not be displayed].
9	$USER \to ME$	The user ends the call after 5 s. The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

# Expected Sequence 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.2.1	displayed instead of the first alpha identifier
4	$ME \to USER$	ME displays the basic icon during	
		a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	/ 0	TERMINAL RESPONSE 3.2.1A	[Command performed successfully]
9	$USER \to ME$	The user ends the call after 5 s.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.2.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.2.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

## Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
_	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	32	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01										

TERMINAL RESPONSE: SET UP CALL 3.2.1A

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

# Expected Sequence 3.2B (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$		Including icon identifier, icon shall be
		CALL 3.2.1	displayed instead of the first alpha identifier
4	$ME \to USER$	ME display "Set up call Icon 3.2.1"	
		without the icon	
5	$USER \to ME$	•	[user confirmation]
6	$ME { ightarrow} SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 3.2.1B	[Command performed successfully, but
			requested icon could not be displayed].
9	USER $\rightarrow$ ME	The user ends the call after 5 s.	
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

BFR-TI V	81	03	01	10	00	82	02	82	81	83	01	04

# Expected Sequence 3.3A (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be displayed in
		CALL 3.3.1	addition of the first alpha identifier
4	$ME \rightarrow USER$	ME displays "Set up call Icon	
		3.3.1" and the colour icon during a	
		user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 3.3.1A	[Command performed successfully]
9	USER $\rightarrow$ ME	The user ends the call after 5 s.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: SET UP CALL 3.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.3.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 2 in EF IMG>

## Coding:

BER-TLV:	D0	30	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	33	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	01	02										

TERMINAL RESPONSE: SET UP CALL 3.3.1A

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

Coding:

BER-TLV: 8	81 03	01 10	00	82	02	82	81	83	01	00	
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# Expected Sequence 3.3B (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.3.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including icon identifier, icon shall be
		CALL 3.3.1	displayed in addition of the first alpha
			identifier
4	$ME \rightarrow USER$	ME only display alpha string: " Set	
		up call Icon 3.3.1"	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \to SIM$	TERMINAL RESPONSE 3.3.1B	[Command performed successfully, but
			requested icon could not be displayed].
9	$USER \to ME$	The user ends the call after 5 s.	
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.3.1B

Logically:

Command details

Command number:

Command type: SET UP CALL

1

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	04

# Expected Sequence 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	Including a second alpha identifier and two
		CALL 3.4.1	icons
4	$ME \rightarrow USER$	ME displays the basic icon during	
		a user confirmation phase.	
5	$USER \to ME$	The user confirms the set up call	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456p1p2". The ME	
		displays the basic icon without the	
		text during the set up call.	
7	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE 3.4.1A	[Command performed successfully]
9	LICED VAL	The user ends the call after 5 s.	
9	$USER \to ME$	The ME returns in idle mode.	
		THE ME TELUMS IN IDIE MODE.	

PROACTIVE COMMAND: SET UP CALL 3.4.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "Set up call Icon 3.4.1"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>
Alpha identifier: "Set up call Icon 3.4.2"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

BER-TLV:	D0	4C	81	03	01	10	00	82	02	81	83	85
	16	53	65	74	20	75	70	20	63	61	6C	6C
	20	49	63	6F	6E	20	33	2E	34	2E	31	86
	09	91	10	32	04	21	43	65	1C	2C	9E	02
	00	01	85	16	53	65	74	20	75	70	20	63
	61	6C	6C	20	49	63	6F	6E	20	33	2E	34
	2E	32	9E	02	00	01						

TERMINAL RESPONSE: SET UP CALL 3.4.1A

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

# Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 3.4.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$		Including a second alpha identifier and two
		1 -	icons
4	$ME \rightarrow USER$	ME displays "Set up call Icon	
_		3.4.1" without the icon	
5		The user confirms the set up call	[user confirmation]
6	$ME \to SS$	The ME attempts to set up a call to	
		"+012340123456p1p2". The ME	
		displays "Set up call Icon 3.4.2" without the icon during the set up	
		call.	
7	$SS \rightarrow ME$	The ME receives the CONNECT	
	00 / IVIL	message from the system	
		simulator.	
8	$ME \to SIM$	TERMINAL RESPONSE 3.4.1B	[Command performed successfully, but
			requested icon could not be displayed].
9	$USER \to ME$	The user ends the call after 5 s.	
		The ME returns in idle mode.	

TERMINAL RESPONSE: SET UP CALL 3.4.1B

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

## 27.22.4.13.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1A to 3.4B.

## 27.22.4.14 POLLING OFF

## 27.22.4.14.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.14.2 Conformance requirement

The ME shall support the POLLING OFF as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.14, clause 6.6.14, clause 6.8, clause 6.11, clause 12.6 and clause 12.7.

## 27.22.4.14.3 Test purpose

To verify that the ME cancels the effect of any previous POLL INTERVAL commands and does not effect SIM presence detection.

## 27.22.4.14.4 Method of test

#### 27.22.4.14.4.1 Initial conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

## 27.22.4.14.4.2 Procedure

# **Expected Sequence 1.1 (POLLING OFF)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POLLING	
		INTERVAL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Interval = 1 min
		POLL INTERVAL 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POLL	[command performed successfully, duration
		INTERVAL 1.1.1 A or	depends on the ME's capabilities]
		TERMINAL RESPONSE:	
		POLL INTERVAL 1.1.1B	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POLLING OFF	
		1.1.2	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		POLLING OFF 1.1.2	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[command performed successfully]
•		POLLING OFF 1.1.2	
9	$USER \to SIM$	•	
10	$ME \rightarrow SIM$	Periods of inactivity on the	
		SIM-ME interfaceshall not	
		exceed 30 seconds	
11	$USER \to SIM$		
		after call setup	

PROACTIVE COMMAND: POLL INTERVAL 1.1.1

Logically:

Command details

Command number:

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Duration

Time unit: Minutes
Time interval: 1

Coding:

BER-TLV:	D0	0D	81	03	01	03	00	82	02	81	82	84
•	02	00	01									

TERMINAL RESPONSE: POLL INTERVAL 1.1.1A

Logically:

Command details

Command number: 1

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Minutes
Time interval: 1

Coding:

BER-TLV:	81	03	01	03	00	82	02	82	81	83	01	00
	84	02	00	01								

TERMINAL RESPONSE: POLL INTERVAL 1.1.1B

Logically:

Command details

Command number: 1

Command type: POLL INTERVAL

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Duration

Time unit: Seconds
Time interval: 60

84	02	01	3C				

NOTE: If the requested poll interval is not supported by the ME, the ME is allowed to use a different one as stated in 3GPP TS 11.14 [13], subclause 6.4.6.

PROACTIVE COMMAND: POLLING OFF 1.1.2

Logically:

Command details

Command number: 1

Command type: POLLING OFF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Coding:

DED TIV			~ 4	00	~ 4	- 4		0.0	00	0.4	00
BER-TLV:	D0	09	81	03	01	04	00	82	02	81	82

TERMINAL RESPONSE: POLLING OFF 1.1.2

Logically:

Command details

Command number:

Command type: POLLING OFF

Command qualifier:

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

"00"

Coding:

# 27.22.4.14.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

# 27.22.4.15 PROVIDE LOCAL INFORMATION

# 27.22.4.15.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.15.2 Conformance requirement

The ME shall support the PROVIDE LOCAL INFORMATION facility as defined in:

• 3GPP TS 11.14 [15] clause 6.4.15.

# 27.22.4.15.3 Test purpose

To verify that the ME returns the following requested local information within a TERMINAL RESPONSE:

- location information:
  - Mobile Country Code (MCC);
  - Mobile Network Code (MNC);
  - Location Area Code (LAC); and
  - cell ID of the current serving cell;
- the IMEI of the ME;
- the Network Measurement Results and the BCCH channel list;
- the current date, time and time zone;
- the current ME language setting;
- the Timing Advance;

if the local information is stored in the ME; otherwise, sends the correct error code to the SIM in the TERMINAL RESPONSE.

# 27.22.4.15.4 Method of tests

#### 27.22.4.15.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator and has performed the location update procedure.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;
- Timing advance = 0;
- Neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

The elementary files are coded as the SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.15.4.2 Procedure

# Expected Sequence 1.1 (PROVIDE LOCAL INFORMATION, Local Info (MCC, MNC, LAC & Cell ID))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully, MCC MNC LAC
		LOCAL INFORMATION 1.1.1A	and Cell Identity as system simulator, option A shall apply for GSM parameters]
		or.	apply for GSIM parameters]
		or	
			[Command performed successfully, MCC MNC LAC
		LOCAL INFORMATION 1.1.1B	and Cell Identity as system simulator, option B shall apply for PCS1900 parameters]

# PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: SIM Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 26	
----------------------------	--

# TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1A

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Location Information

MCC & MNC: MCC = 001, MNC = 01

Location Area Code: 0001 Cell Identity Value: 0001

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	07	00	F1	10	00	01	00	01			

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.1.1B

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "00" Location information (MCC MNC LAC and Cell Identity)

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**Location Information** 

MCC & MNC: MCC = 001, MNC = 011

Location Area Code: 0001 Cell Identity Value: 0001

Coding:

BER-TLV:	81	03	01	26	00	82	02	82	81	83	01	00
	93	07	00	11	10	00	01	00	01			

# **Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully, IMEI
		LOCAL INFORMATION 1.2.1	as system simulator]

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "01" IMEI of the ME

Device identities

Source device: SIM Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	01	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "01" IMEI of the ME

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

**IMEI** 

IMEI of the ME: The IMEI of the ME

The result coding depends on the Mobile IMEI value.

#### Coding:

BER-TLV:	81	03	01	26	01	82	02	82	81	83	01	00
	94	08	XX									

#### Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network Measurement Results (NMR))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully,
		LOCAL INFORMATION 1.3.1	NMR as system simulator ]

# PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.3.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	02	82	02	81	82
----------	----	----	----	----	----	----	----	----	----	----	----

#### TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.3.1

The actual values of the measurements are not tested.

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "02" Network Measurement Results

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as

an example in the BER-TLV)

BCCH channel list 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

Coding:

BER-TLV:	81	03	01	26	02	82	02	82	81	83	01	00
	96	10	34	34	00	00	00	00	00	00	00	00
	00	00	00	00	00	00	9D	0D	8C	63	58	E2
	39	8F	63	F9	06	45	91	A4	90			

#### Expected Sequence 1.4 (PROVIDE LOCAL INFORMATION, Date, Time, Time Zone)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.4.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.4.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "03" Date Time and Time Zone

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	03	82	02	81	82

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION
Qualifier: "03" Date Time and Time Zone

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Date-Time and Time Zone date an time set by the user: 7<sup>th</sup> May 2002, 14h 08mn 17s, no time zone

information, as an example in TLV

BER-TLV:	81	03	01	26	03	82	02	82	81	83	01	00
	A6	07	20	50	70	41	80	71	FF			

# **Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION	
		1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.5.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.5.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "04" Language setting

Device identities

Source device: SIM Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	04	82	02	81	82
DEIX IEV.		00	01	00	01	20	U-T	02	02	01	02

TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "04" Language setting

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully
Language English ("en") as an example for TLV

Coding:

BER-TLV:	81	03	01	26	04	82	02	82	81	83	01	00
	AD	02	65	6E								

# **Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION, Timing advance)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING	
		PROVIDE LOCAL INFORMATION 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: PROVIDE	
		LOCAL INFORMATION 1.6.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: PROVIDE	[Command performed successfully]
		LOCAL INFORMATION 1.6.1	

PROACTIVE COMMAND: PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details

Command number:

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "05" Timing Advance

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	26	05	82	02	81	82

#### TERMINAL RESPONSE: PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION

Qualifier: "05" Timing Advance

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timing Advance 2 bytes

ME status: "00" ME is in idle state Idle State

Timing Advance: 0

Coding:

BER-TLV:	81	03	01	26	05	82	02	82	81	83	01	00
	AF	02	00	00								

# 27.22.4.15.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

# 27.22.4.16 SET UP EVENT LIST

## 27.22.4.16.1 SET UP EVENT LIST (normal)

#### 27.22.4.16.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.16.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Event List facility as defined in:

• 3GPP TS 11.14 [15] clause 6.4.16 and clause 6.6.16.

Additionally the ME shall support the Event Download: Call Connect and the Event Download: Call Disconnected mechanism as defined in:

• 3GPP TS 11.14 [15] clause 11.2, clause 11.2.1, clause 11.2.2, clause 11.3, clause 11.3.1 and clause 11.3.2.

#### 27.22.4.16.1.3 Test purpose

To verify that the ME accepts a list of events that it shall monitor the current list of events supplied by the SIM, is able to have this current list of events replaced and is able to have the list of events removed.

To verify that when the ME has successfully accepted or removed the list of events, it shall send TERMINAL RESPONSE (OK) to the SIM and when the ME is not able to successfully accept or remove the list of events, it shall send TERMINAL RESPONSE (Command beyond ME's capabilities).

#### 27.22.4.16.1.4 Method of test

#### 27.22.4.16.1.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.16.1.4.2 Procedure

#### **Expected Sequence 1.1 (SET UP EVENT LIST, Set Up Call Connect Event)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP	
		EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT	
		LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT	
		LIST 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
6	$SS \rightarrow ME$	SETUP 1.1.1	[Incoming call alert]
7	$USER \to ME$	User shall accept the incoming call	
8	$ME \to SS$	CONNECT 1.1.1	
9	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD CALL	[Call Connected Event]
		CONNECTED 1.1.1	-
10	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	

# PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### **SET UP 1.1.1**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

CONNECT 1.1.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1

Logically

Event list

Event 1: Call Connected

Device identities

Source device: ME Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

BFR-TI V·	D6	OΑ	99	01	Ω1	82	02	82	21	9C	01	80

# **Expected Sequence 1.2 (SET UP EVENT LIST, Replace Event)**

ì
nected

# PROACTIVE COMMAND: SET UP EVENT LIST 1.2.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected Event 2: Call Disconnected

Coding:

BER-TLV:	D0	0D	81	03	01	05	00	82	02	81	82	99
	02	01	02									

# TERMINAL RESPONSE: SET UP EVENT LIST 1.2.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.2.2

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
·	01	02										

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.2.2

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### **SET UP 1.2.2**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

#### CONNECT 1.2.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

DISCONNECT 1.2.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

# ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2A

Logically:

Event list

Event 1: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

Coding:

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00	
	9A	02	60	90									

## ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2B

Logically:

Event list

Event 1: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

BER-TLV:	D6	0E	99	01	02	82	02	83	81	9C	01	00
	9A	02	E0	90								

# **Expected Sequence 1.3 (SET UP EVENT LIST, Remove Event)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Call Connected Event]
		EVENT LIST 1.3.1	
	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.3.1	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
_		1.3.2	
5	101L / O1101	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Remove Event]
_		EVENT LIST 1.3.2	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
8	0114 145	EVENT LIST 1.3.2	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
10	$SS \rightarrow ME$	SETUP 1.3.2	[Incoming call alert]
11	USER → ME		[Incoming can alert]
12		User shall accept the incoming call CONNECT 1.3.2	
	/ 00		
13	$ME \rightarrow SIM$	No ENVELOPE: EVENT	
1		DOWNLOAD (call connected) sent	
14	$SS \rightarrow ME$	DISCONNECT 1.3.2	

# PROACTIVE COMMAND: SET UP EVENT LIST 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

# TERMINAL RESPONSE: SET UP EVENT LIST 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

BEF	R-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

# PROACTIVE COMMAND: SET UP EVENT LIST 1.3.2

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME
Event list: Empty

Coding:

BER-TLV:	D0	0B	81	03	01	05	00	82	02	81	82	99
	00											

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.3.2

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

#### **SET UP 1.3.2**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

CONNECT 1.3.2

Logically:

Transaction identifier

Ti value: 0 (bit 5-7)

Ti flag: 1 (bit 8)

#### **DISCONNECT 1.3.2**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

# Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.4.1	
2	/ O	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Call Connected Event]
		EVENT LIST 1.4.1	
	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.4.1	
4	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
5	000i / iii.	Power off ME	
6		Power on ME	
7			[Incoming call alert]
8	$USER \to ME$	User shall accept the incoming call	
9	$ME \to SS$	CONNECT 1.4.1	
10	$ME \to SIM$	No ENVELOPE: EVENT	
		DOWNLOAD (call connected) sent	
11	$SS \to ME$	DISCONNECT 1.4.1	

# PROACTIVE COMMAND: SET UP EVENT LIST 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

## TERMINAL RESPONSE: SET UP EVENT LIST 1.4.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### **SET UP 1.4.1**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Address

TON: "Unknown"

NPI: "ISDN/ telephone numbering plan"

Dialling number string: "9876"

#### CONNECT 1.4.1

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

#### **DISCONNECT 1.4.1**

Logically:

Transaction identifier

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause

Value: Normal call clearing

#### 27.22.4.16.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.4.

#### 27.22.4.17 PERFORM CARD APDU

### 27.22.4.17.1 PERFORM CARD APDU (normal)

27.22.4.17.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.17.1.2 Conformance requirement

The ME shall support the Proactive SIM: Perform Card APDU facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.17, clause 6.6.17, clause 6.8, clause 12.6, clause 12.7, clause 12.35, clause 12.36 and clause 12.12.9.

Additionally the ME shall support multiple card operation as defined in:

• 3GPP TS 11.14 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

#### 27.22.4.17.1.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this particular case a special Test-SIM (TestSIM) with T=0 protocol is chosen as additional card for the additional ME card reader (for coding of the TestSIM see annex D).

# 27.22.4.17.1.4 Method of test

#### 27.22.4.17.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The TestSIM is inserted in the additional ME card reader.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

The elementary files of the TestSIM are coded as defined in annex D. Another card with different parameters may be used as TestSIM to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

#### 27.22.4.17.1.4.2 Procedure

# Expected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	
4		RESET CARD	[Perform electrical initialization]
5		ANSWER TO RESET 1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[ATR]
		ON CARD 1.1.1	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
	145 0114	APDU 1.1.1	
8	$ME \rightarrow SIM$	FETCH	[Oalast Mastarfile]
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1	[Select Masterfile]
10	ME SIMO	C-APDU: SELECT 1.1	[Select Masterfile]
11		R-APDU: SELECT 1.1	[Command performed successfully - length
''	SIIVIZ → IVIE	R-APDO. SELECT 1.1	1B' of response data
12	$ME \rightarrow SIM$	TERMINAL RESPONSE:	The of response dataj
12	IVIL / OIIVI	PERFORM CARD APDU 1.1.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	O 7	PENDING: PERFORM CARD	
		APDU 1.1.2	
14	$ME \rightarrow SIM$	FETCH	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Get Response with length '1B']
		PERFORM CARD APDU 1.1.2	
16	$ME \rightarrow SIM2$	C-APDU: GET RESPONSE 1.1	[Get Response with length '1B']
17	$SIM2 \rightarrow ME$	R-APDU: GET RESPONSE 1.1	[Response data with length '1B']
18	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Response data with length '1B']
		PERFORM CARD APDU 1.1.2	

# PROACTIVE COMMAND POWER ON CARD 1.1.1

# Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11

# **ANSWER TO RESET 1.1**

## Logically:

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: 91 T2: 99 T3: 00 T4: 12 T5: C1 T6: 00

Coding:

Coding:	3B	86	00	91	99	00	12	C1	00

# TERMINAL RESPONSE: POWER ON CARD 1.1.1

#### Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: 91
T2: 99
T3: 00
T4: 12
T5: C1
T6: 00

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	01	00
	A1	09	3B	86	00	91	99	00	12	C1	00	

#### PROACTIVE COMMAND PERFORM CARD APDU 1.1.1

## Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'

Data: Master File

# Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	Α0	A4	00	00	02	3F	00				

C-APDU: SELECT 1.1

Logically:

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: Master File

Coding:

Coding: A0 A4 00 00 02 3F 00

R-APDU: SELECT 1.1

Logically:

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

Coding:

Coding: 9F 1B

TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length '1B' of response data

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00	
	A3	02	9F	1B									

#### PROACTIVE COMMAND PERFORM CARD APDU 1.1.2

#### Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: '00

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'

Instruction: GET RESPONSE

P1 parameter: '00' P2 parameter: '00' Le: '1B'

#### Coding:

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	C0	00	00	1B						

#### C-APDU: GET RESPONSE 1.1

# Logically:

## C-APDU

Class: 'A0'

Instruction: GET RESPONSE

P1 parameter: '00' P2 parameter: '00' Le: '1B'

Coding:

Codina:	A0	C0	00	00	1B

## R-APDU: GET RESPONSE 1.1

### Logically:

# R-APDU data

RFU: '00 00'
Not allocated memory: '653 bytes'
File ID: Master File

Type of file: MF

RFU: 00 00 22 FF 01' Length of following data: 14 bytes'

File characteristics:

Clock Stop: Not allowed Min. frequence for GSM algorithm: 13/8 MHz

Technology identification: 3V Technology SIM

CHV1: disabled DFs in current directory: 2

EFs in current directory: 8
Number of CHV and admin. Codes: 3
RFU byte 18: 00

CHV1 status: False representations remaining:

False representations remaining: 3 RFU-bits 7-5: 000

Initialized Secret code:

Unlock CHV1 status:

10 False representations remaining: 000 RFU-bits 7-5: Secret code: Initialized

CHV2 status:

False representations remaining: 3 RFU-bits 7-5: 000 Secret code: Initialized

Unlock CHV2 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized RFU bytes 23: 00

00 83 00 FF Reserved for admin. management:

Status Words

SW1 / SW2: Normal ending of command

Coding:

Coding:	00	00	02	8D	3F	00	01	00	00	22	FF	01	ı
	0E	9B	02	08	03	00	83	8A	83	8A	00	00	ı
	83	00	FF	90	00								ı

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2

Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU data

RFU: '00 00' Not allocated memory: '653 bytes' File ID: Master File Type of file: MF

00 00 22 FF 01' RFU:

Length of following data: 14 bytes'

File characteristics:

Clock Stop: Not allowed Min. frequence for GSM algorithm: 13/8 MHz

Technology identification: 3V Technology SIM

CHV1: disabled

DFs in current directory: 2

EFs in current directory:

3 Number of CHV and admin. Codes: RFU byte 18: 00

CHV1 status:

False representations remaining: RFU-bits 7-5: 000 Secret code: Initialized

Unlock CHV1 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized CHV2 status:

False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV2 status:

False representations remaining: 10
RFU-bits 7-5: 000
Secret code: Initialized
RFU bytes 23: 00

Reserved for admin. management: 00 83 00 FF

Statu Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	А3	0F	00	00	02	8D	3F	00	01	00	00	22
	FF	01	0E	90	00							

# Expected Sequence 1.2 (PERFORM CARD APDU, card reader 1, additional card inserted, Select DF GSM, Select EF PLMN, Update Binary, Read Binary on EF PLMN)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD 1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1	
4		RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	ANSWER TO RESET 1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[ATR]
		ON CARD 1.1	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
0	ME . CIM	APDU 1.2.1 FETCH	
8	$ME \rightarrow SIM$	PROACTIVE COMMAND:	[Select GSM]
9	$SIM \rightarrow ME$	PERFORM CARD APDU 1.2.1	[Select Golvi]
10	ME \ SIM2	C-APDU: SELECT 1.2a	[Select GSM]
11		R-APDU: SELECT 1.2a	[coloot com]
12	ME → SIM	TERMINAL RESPONSE:	
	IVIL / OIIVI	PERFORM CARD APDU 1.2.1	
13	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.2.2	
14	$ME \rightarrow SIM$	FETCH	
15	$SIM \to ME$	PROACTIVE COMMAND:	[Select PLMN]
		PERFORM CARD APDU 1.2.2	
16		C-APDU: SELECT 1.2b	[Select PLMN]
17		R-APDU: SELECT 1.2b	
18	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
40	0114 145	PERFORM CARD APDU 1.2.2	
19	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD APDU 1.2.3	
20	$ME \rightarrow SIM$	FETCH	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Update Binary]
	SIIVI -> IVIL	PERFORM CARD APDU 1.2.3	[Opdate Billary]
22	$ME \rightarrow SIM2$	C-APDU: UPDATE BINARY 1.2	[Update Binary]
23		R-APDU: UPDATE BINARY 1.2	
24	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
	,	PERFORM CARD APDU 1.2.3	
25	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.2.4	

Step	Direction	MESSAGE / Action	Comments
26	$ME \rightarrow SIM$	FETCH	
27	$SIM \to ME$	PROACTIVE COMMAND:	[Read Binary]
		PERFORM CARD APDU 1.2.4	
28	$ME \rightarrow SIM2$	C-APDU: READ BINARY 1.2	[Read Binary]
29	$SIM2 \rightarrow ME$	R-APDU: READ BINARY 1.2	
30	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		PERFORM CARD APDU 1.2.4	
31	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: PERFORM CARD	
		APDU 1.2.5	
32	$ME \rightarrow SIM$	FETCH	
33	$SIM \to ME$	PROACTIVE COMMAND:	[Update Binary]
		PERFORM CARD APDU 1.2.5	
34	$ME \rightarrow SIM2$	C-APDU: UPDATE BINARY 1.2a	[Update Binary]
35	$SIM2 \to ME$	R-APDU: UPDATE BINARY 1.2	
36	$ME \rightarrow SIM$	TERMINAL RESPONSE:	
		PERFORM CARD APDU 1.2.3	

#### PROACTIVE COMMAND PERFORM CARD APDU 1.2.1

# Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: DF GSM

Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	7F	20				

# PROACTIVE COMMAND: PERFORM CARD APDU 1.2.2

# Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: EF PLMN

# Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	6F	30				

#### PROACTIVE COMMAND: PERFORM CARD APDU 1.2.3

Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

BER-TLV:	D0	28	81	03	01	30	00	82	02	81	11	A2
_	1D	A0	D6	00	00	18	00	01	02	03	04	05
	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11
	12	13	14	15	16	17						

#### PROACTIVE COMMAND: PERFORM CARD APDU 1.2.4

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'

Instruction: READ BINARY

P1 parameter: '00' P2 parameter: '00' Le: '18'

BER-TLV:	D0	10	81	03	01	30	00	82	02	81	11	A2
	05	A0	B0	00	00	18						

#### PROACTIVE COMMAND: PERFORM CARD APDU 1.2.5

# Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

# Coding:

BER-TLV:	D0	28	81	03	01	30	00	82	02	81	11	A2
	1D	A0	D6	00	00	18	FF	FF	FF	FF	FF	FF
	FF											
	FF	FF	FF	FF	FF	FF						

#### C-APDU: SELECT 1.2a

# Logically:

### C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: DF GSM

# Coding:

Coding: A0 A4 00 00 02 7F 20	Coding:	A0	A4	00	00	02	7F	20
------------------------------	---------	----	----	----	----	----	----	----

# C-APDU: SELECT 1.2b

# Logically:

# C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: EF PLMN

0 1:	4.0	Λ 4	00	00	00	٥.	-00
lCodina:	I AU	I A4	00	00	1 02	l 6F	30

C-APDU: UPDATE BINARY 1.2

Logically:

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Coding:

Coding:	A0	D6	00	00	18	00	01	02	03	04	05	06
	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12
	13	14	15	16	17							

C-APDU: READ BINARY 1.2

Logically:

C-APDU

Class: 'A0'

Instruction: READ BINARY

P1 parameter: '00' P2 parameter: '00' Le: '18'

Coding:

Coding: A0 B0 00 00 18

C-APDU: UPDATE BINARY 1.2a

Logically:

C-APDU

Class: 'A0'

Instruction: UPDATE BINARY

P1 parameter: '00' P2 parameter: '00' Lc: '18'

Coding:

Coding:	A0	D6	00	00	18	FF						
	FF											
	FF	FF	FF	FF	FF							

R-APDU: SELECT 1.2a

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '1B' of response data

Coding:

Coding: 9F 1B

R-APDU: SELECT 1.2b

Logically:

Status Words

SW1 / SW2: Normal ending of command - length '0F' of response data

Coding:

Coding: 9F 0F

R-APDU: UPDATE BINARY 1.2

Logically:

Status Words

SW1 / SW2: Normal ending of command

Coding:

Coding: 90 00

R-APDU: READ BINARY 1.2

Logically:

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

Coding:	00	01	02	03	04	05	06	07	80	09	0A	0B
	0C	0D	0E	0F	10	11	12	13	14	15	16	17
	90	00										

TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 1B of response data

#### Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	A3	02	9F	1B								

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2

Logically:

Command details

Command number:

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Command performed successfully - length 0F of response data

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	А3	02	9F	0F								

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

R-APDU

Status Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	А3	02	90	00								

# TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM Result

General Result: Command performed successfully

R-APDU

R-APDU data

Data: '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17'

Status Words

SW1 / SW2: Normal ending of command

Coding:

BER-TLV:	81	03	01	30	00	82	02	11	81	83	01	00
	А3	1A	00	01	02	03	04	05	06	07	08	09
	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15
	16	17	90	00								

# Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER OFF CARD	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Power off card reader 1]
		POWER OFF CARD 1.3.1	
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[Successful]
		OFF CARD 1.3.1	
6	ME	SIM2 is powered off from ME card	
		reader	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		1.1.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.1.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Card powered off]
		PERFORM CARD APDU 1.3.1	

PROACTIVE COMMAND: POWER OFF CARD 1.3.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE: POWER OFF CARD 1.3.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	01
_	00										

# TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error

Additional Information: Card powered off

Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	04									

## Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	ME	SIM2 is removed from ME card	
		reader	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.1.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[No card inserted]
		PERFORM CARD APDU 1.4.1	-

#### TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card removed or not present

# Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
_	38	02									

# Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[invalid card reader ID]
		PENDING: PEFORM CARD APDU	
		1.5.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 1.5.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Specified reader not valid]
		PERFORM CARD APDU 1.5.1	

#### PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 7

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'
Data: Master File

Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	17	A2
'-	07	A0	A4	00	00	02	3F	00				

C-APDU: SELECT 1.1

Logically:

C-APDU

Class: 'A0'
Instruction: SELECT
P1 parameter: '00'
P2 parameter: '00'
Lc: '02'

Data: Master File

Coding:	A0	A4	00	00	02	3F	00
County.	, 10	, , , ,	00	00	U _	0.	00

TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1

Logically:

Command details

Command number: 1

Command type: PERFORM CARD APDU

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Specified reader not valid

#### Coding:

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	09									

#### 27.22.4.17.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5.

#### 27.22.4.17.2 PERFORM CARD APDU (detachable card reader)

27.22.4.17.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.17.2.2 Conformance requirement

27.22.4.17.2.3 Test purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.17.2.4 Method of test

27.22.4.17.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

#### Procedure 27.22.4.17.2.4.2

# Expected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PEFORM CARD APDU	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Select Master File]
		PERFORM CARD APDU 2.1.1	-
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Card reader detached]
		PERFORM CARD APDU 2.1.1	-

# PROACTIVE COMMAND: PERFORM CARD APDU 2.1.1

Logically:

Command details

Command number:

PERFORM CARD APDU Command type:

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card Reader 1

C-APDU

'A0' Class: Instruction: **SELECT** P1 parameter: '00' P2 parameter: '00' Lc: '02' Data: Master File

Coding:

BER-TLV:	D0	12	81	03	01	30	00	82	02	81	11	A2
	07	A0	A4	00	00	02	3F	00				

# TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1

Logically:

Command details

Command number:

PERFORM CARD APDU Command type:

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card reader removed or not present

BER-TLV:	81	03	01	30	00	82	02	82	81	83	02
	38	01									

#### 27.22.4.17.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.18 POWER OFF CARD

#### 27.22.4.18.1 POWER OFF CARD (normal)

## 27.22.4.18.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.18.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power Off Card facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.18, clause 6.6.18, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, clause 5.2 and annex H.

#### 27.22.4.18.1.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

#### 27.22.4.18.1.4 Method of test

#### 27.22.4.18.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

#### 27.22.4.18.1.4.2 Procedure

#### Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER OFF CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER OFF	[Power off card reader 1]
		CARD 1.1.1	
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF	[Successful]
		CARD 1.1.1	-

PROACTIVE COMMAND: POWER OFF CARD 1.1.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	32	00	82	02	81	11
D-1 \ 1 - V .			<b>O</b> .		<b>.</b>	- U	00			<b>.</b>	

## TERMINAL RESPONSE: POWER OFF CARD 1.1.1

Logically:

Command details

Command number:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	01
	00										

## Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: POWER	
		OFF CARD 1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \to ME$	PROACTIVE COMMAND: POWER OFF CARD	[Power off card reader 1]
		1.1.1	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF CARD	[No card inserted]
		1.2.1	

## TERMINAL RESPONSE: POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card removed or not present

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	02
	38	02									

#### 27.22.4.18.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.2.

#### 27.22.4.18.2 POWER OFF CARD (detachable card reader)

27.22.4.18.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.18.2.2 Conformance requirement

Void.

#### 27.22.4.18.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4 Method of test

27.22.4.18.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

#### 27.22.4.18.2.4.2 Procedure

## Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER OFF CARD 2.1.1	
	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER	[Power off card reader 1]
		OFF CARD 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON	[Card reader removed or not present]
		CARD 2.1.1	

PROACTIVE COMMAND: POWER OFF CARD 2.1.1

Logically:

Command details

Command number:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	32	00	82	02	81	11	1
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#### TERMINAL RESPONSE: POWER OFF CARD 2.1.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card reader removed or not present

Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	02
	38	01									

#### 27.22.4.18.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

#### 27.22.4.19 POWER ON CARD

#### 27.22.4.19.1 POWER ON CARD (normal)

#### 27.22.4.19.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.19.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power On Card facility as defined in:

- 3GPP TS 11.14 [15] clause 6.1, clause 6.4.19, clause 6.6.19, clause 12.6, clause 12.7, clause 12.12, clause 12.12.9, clause 12.34, clause 5.2 and annex H.
- ISO /IEC 7816-3 [21].

#### 27.22.4.19.1.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.19.1.4 Method of test

27.22.4.19.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

#### 27.22.4.19.1.4.2 Procedure

## Expected Sequence 1.1 (POWER ON CARD, card reader 1)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER ON CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: POWER ON	[Power on card reader 1]
		CARD 1.1.1	
4	$ME \rightarrow SIM2$	RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	ANSWER TO RESET 1.1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON	[ATR]
		CARD 1.1.1	-

#### PROACTIVE COMMAND: POWER ON CARD 1.1.1

## Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

#### Coding:

BER-TLV:	D0	09	81	በ3	01	31	00	82	02	81	11 1
DEIX IEV.		00	O I	03	01	01	00	02	02	01	

## **ANSWER TO RESET 1.1.1**

#### Logically:

TS (Initial character):	'3B'
T0 (Format character):	0F
T1 (Historical character):	'P'
T2 (Historical character):	'o'
T3 (Historical character):	'w'
T4 (Historical character):	'e'
T5 (Historical character):	'r'
T6 (Historical character):	'O'
T7 (Historical character):	'n'
T8 (Historical character):	'C'
T9 (Historical character):	'a'
T10 (Historical character):	'r'

T11 (Historical character): 'd'
T12 (Historical character): 'T'
T13 (Historical character): 'e'
T14 (Historical character): 's'
T15 (Historical character): 't'

#### Coding:

BER-TLV:	3B	0F	50	6F	77	65	72	4F	6E	43	61	72
	64	54	65	74	75							

#### TERMINAL RESPONSE: POWER ON CARD 2.1.1

#### Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

TS (Initial character): '3B' 0F T0 (Format character): 'P' T1 (Historical character): T2 (Historical character): 'o' T3 (Historical character): 'w' T4 (Historical character): 'e' 'r' T5 (Historical character): T6 (Historical character): 'O' T7 (Historical character): 'n' T8 (Historical character): 'C' T9 (Historical character): 'a' T10 (Historical character): 'r' T11 (Historical character): 'd' T12 (Historical character): 'T' 'e' T13 (Historical character): T14 (Historical character): 's' 't' T15 (Historical character):

BER-TLV:	81	03	01	31	00	82	02	82	81	83	01	00
	A1	11	3B	0F	50	6F	77	65	72	4F	6E	43
	61	72	64	54	65	74	75					

## Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	
4	$ME \rightarrow SIM2$	RESET CARD	[Perform electrical initialization]
5	$SIM2 \rightarrow ME$	NO ATR	[No ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[No ATR]
		ON CARD 1.2.1	

TERMINAL RESPONSE: POWER ON CARD 1.2.1

Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: MultipleCard commands error

Additional Information: Card mute

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
	06											

## Expected Sequence 1.3 (POWER ON CARD, card reader 1, no card inserted)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card	
		reader	
2	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		1.1.1	
3	$ME \to SIM$	FETCH	
4	$SIM \to ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 1.1.1	
5	$ME \to SIM$	TERMINAL RESPONSE: POWER	[Card removed or not present]
		ON CARD 1.3.1	

TERMINAL RESPONSE: POWER ON CARD 1.3.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: Card reader 0

Destination device: SIM

Result

General Result: MultipleCard commands error

Additional Information: Card removed or not present

#### Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
·	02											

## 27.22.4.19.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

## 27.22.4.19.2 POWER ON CARD (detachable card reader)

27.22.4.19.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.19.2.2 Conformance requirement

27.22.4.19.2.3 Test purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

#### 27.22.4.19.2.4.2 Procedure

## Expected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: POWER ON CARD	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[Power on card reader 1]
		POWER ON CARD 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER	[Card reader removed or not present]
		ON CARD 2.1.1	

#### PROACTIVE COMMAND: POWER ON CARD 2.1.1

Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11	
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#### TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details

Command number:

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: Card reader 0

Destination device: SIM

Result

General Result: MultipleCard commands error Additional Information: Card reader removed or not present

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	02	38
	01											

#### 27.22.4.19.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

#### 27.22.4.20 GET READER STATUS

#### 27.22.4.20.1 GET READER STATUS (normal)

#### 27.22.4.20.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.20.1.2 Conformance requirement

The ME shall support the Proactive SIM: Get Card Reader Status facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 5.2, clause 6.4.20, clause 6.6.20, clause 6.8, clause 12.6, clause 12.7, clause 12.33, clause 12.57 and annex H.

Additionally the ME shall support multiple card operation as defined in:

• 3GPP TS 11.14 [15] clause 6.4.19, clause 6.6.19, clause 6.4.18 and clause 6.6.18.

## 27.22.4.20.1.3 Test purpose

To verify that the ME sends starts a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this test case the second SIM-Simulator (SIM2) shall response with the ATR "3B 00".

27.22.4.20.1.4 Method of test

27.22.4.20.1.4.1 Initial conditions

The ME shall support the Proactive SIM: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2). Instead of the second SIM Simulator a card with different parameters may be used as SIM2 to execute these tests. In this case the SIM Simulator shall take into account the corresponding response data.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

#### 27.22.4.20.1.4.2 Procedure

### Expected Sequence 1.1 (GET CARD READER STATUS, card reader 1, card inserted, card powered)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		POWER ON CARD 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: POWER ON	[Power on card reader 1]
		CARD 1.1.1	
4		RESET CARD	[Perform electrical initialization]
5		ANSWER TO RESET 1.1.1	[ATR]
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER ON CARD 1.1.1	[ATR]
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
8	$ME \to SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1a Or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1b or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1c	[Successful]
		or TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1d	[Successful]

#### PROACTIVE COMMAND: POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV:	D0	09	81	03	01	31	00	82	02	81	11

#### **ANSWER TO RESET 1.1.1**

Logically:

TS (Initial character): '3B' TO (Format character): '00'

Coding:

BER-TLV: A1 02 3B 00

#### TERMINAL RESPONSE: POWER ON CARD 1.1.1

Logically:

Command details

Command number: 1

Command type: POWER ON CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card ATR

TS (Initial character): '3B' T0 (Format character): '00'

Coding:

BER-TLV:	81	03	01	31	00	82	02	82	81	83	01	00
	Α1	02	3B	00								

#### PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	33	00	82	02	81	82
----------	----	----	----	----	----	----	----	----	----	----	----

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1a

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: Yes
Card powered: Yes

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	F1							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1b

## Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: Yes
Card powered: Yes

#### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	D1							

## TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1c

## Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01' Card reader removable: 'Yes' Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: Yes
Card powered: Yes

#### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	F9							

## TERMINAL RESPONSE: GET CARD READER STATUS 1.1.1d

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: Yes
Card powered: Yes

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	D9							

## Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: POWER OFF CARD 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: POWER OFF CARD 1.2.1	[Power off card reader 1]
4	$ME \rightarrow SIM2$	POWER OFF CARD	[Power off card reader 1]
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: POWER OFF CARD 1.2.1	[Successful]
6	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1	
7	$ME \rightarrow SIM$	FETCH	
8	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD READER STATUS 1.1.1	[Get Card Reader Status]
9	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a Or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1c Or	[Successful]
		TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1d	[Successful]

## PROACTIVE COMMAND: POWER OFF CARD 1.2.1

Logically:

Command details

Command number:

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Card reader 1

Coding:

BER-TLV: D0 09 81 03 01 32 00 82	02 81	11
----------------------------------	-------	----

#### TERMINAL RESPONSE: POWER OFF CARD 1.2.1

Logically:

Command details

Command number: 1

Command type: POWER OFF CARD

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

#### Coding:

BER-TLV:	81	03	01	32	00	82	02	82	81	83	01
	00										

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1a

Logically:

Command details

Command number:

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	71							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1b

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	51							

TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1c

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: Yes
Card powered: No

#### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	79							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.2.1d

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '01'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: Yes
Card powered: No

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	59							

## Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

Step	Direction	MESSAGE / Action	Comments
1	SIM2	SIM2 is removed from ME card reader	
2	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		GET CARD READER STATUS 1.1.1	
3	$ME \rightarrow SIM$	FETCH	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD	[Get Card Reader Status]
		READER STATUS 1.1.1	
5		TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.3.1a	
		or	
		TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.3.1b	
		or	
		TERMINAL RESPONSE: GET CARD	[Successful]
		READER STATUS 1.3.1c	
		or	
		TERMINAL RESPONSE: GET CARD	
		READER STATUS 1.3.1d	[Successful]

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1a

#### Logically:

Command details

Command number:

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: No
Card powered: No

#### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	31							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1b

## Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'

Card reader removable: 'No'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: No
Card powered: No

#### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	11							

### TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1c

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'Yes'
Card present in reader: No
Card powered: No

### Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	39							

#### TERMINAL RESPONSE: GET CARD READER STATUS 1.3.1d

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: '1'
Card reader removable: 'Yes'
Card reader present: Yes
Card reader ID-1 size: 'No'
Card present in reader: No
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	19							

#### 27.22.4.20.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

## 27.22.4.20.2 GET CARD READER STATUS (detachable card reader)

27.22.4.20.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.20.2.2 Conformance requirement

Void.

27.22.4.20.2.3 Test purpose

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4 Method of test

27.22.4.20.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.20.2.4.2 Procedure

#### Expected Sequence 2.1 (GET CARD READER STATUS, no card reader attached)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET CARD	
		READER STATUS 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET CARD READER	[Get Card Reader Status]
		STATUS 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: GET CARD READER	[Successful]
		STATUS 2.1.1a	
		or	
		TERMINAL RESPONSE: GET CARD READER	[Successful]
		STATUS 2.1.1b	

PROACTIVE COMMAND: GET CARD READER STATUS 2.1.1

Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card Reader Status

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	33	00	82	02	81	82
DEIX IEV.	00	00		00		00	00	02	02	0.	02

#### TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1a

#### Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	29							

#### TERMINAL RESPONSE: GET CARD READER STATUS 2.1.1b

## Logically:

Command details

Command number: 1

Command type: GET CARD READER STATUS

Command qualifier: Card reader status

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

BER-TLV:	81	03	01	33	00	82	02	82	81	83	01
	00	A0	01	09							

#### 27.22.4.20.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 2.1.

## 27.22.4.21 TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION

## 27.22.4.21.1 TIMER MANAGEMENT (normal)

## 27.22.4.21.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.21.1.2 Conformance Requirement

The ME shall support the TIMER MANAGEMENT as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

## 27.22.4.21.1.3 Test purpose

To verify that the ME manages correctly its internal timers, start a timer, deactivate a timer or return the current value of a timer according to the Timer Identifier defined in the TIMER MANAGEMENT proactive SIM command.

#### 27.22.4.21.1.4 Method of Test

#### 27.22.4.21.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.21.1.4.2 Procedure

## Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 1]
		TIMER MANAGEMENT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
_		MANAGEMENT 1.1.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[ask value of timer 1]
		TIMER MANAGEMENT 1.1.2	
8	$ME \rightarrow SIM$		[command performed successfully]
	0184 845	MANAGEMENT 1.1.2	Defens time a sumina al
9	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: TIMER	Before timer expires!
		MANAGEMENT 1.1.3	
10	$ME \rightarrow SIM$	FETCH	
11	IVIE -> SIIVI	PROACTIVE COMMAND:	[reinitialize timer 1]
11		TIMER MANAGEMENT 1.1.3	[remidalize timer i]
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
12	IVIL -> SIIVI	MANAGEMENT 1.1.3	[confinant performed successfully]
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 30 s following reception of the Terminal
	Olivi 7 IVIL	PENDING: TIMER	Response
		MANAGEMENT 1.1.4	. 100p000
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 1]
		TIMER MANAGEMENT 1.1.4	j <sup>*</sup>
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.1.4	·

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 5 min

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	50	00					

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	01										

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 1min 30s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	10	03			,		

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 1

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding::

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

1

Timer identifier

Identifier of timer:

Timer value

Value of timer: value < to the timer value of command 1.1.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	01	A5	03	XX	XX	XX				

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: value < to the timer value of command 1.1.3

## Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	00
	A4	01	01	A5	03	XX	XX	XX				

## Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 2]
		TIMER MANAGEMENT 1.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
_		MANAGEMENT 1.2.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
		MANAGEMENT 1.2.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[ask value of timer 2]
8	NAT OINA	TIMER MANAGEMENT 1.2.2 TERMINAL RESPONSE: TIMER	[command parformed augeografully]
0	$ME \rightarrow SIM$	MANAGEMENT 1.2.2	[command performed successfully]
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	Before timer expires!
3	SIIVI - IVIE	PENDING: TIMER	Delote titlet expires:
		MANAGEMENT 1.2.3	
10	$ME \rightarrow SIM$	FETCH	
11	IVIL 7 OIIVI	PROACTIVE COMMAND:	[reinitialize timer 2]
1		TIMER MANAGEMENT 1.2.3	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.2.3	, , , , , , , , , , , , , , , , , , , ,
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 10 seconds following reception of
		PENDING: TIMER	Terminal Response
		MANAGEMENT 1.2.4	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 2]
		TIMER MANAGEMENT 1.2.4	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.2.4	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 23 h 59 min 59 s

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	02	Α5	03	32	95	95					

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	02										

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 40 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	02	A5	03	00	00	04					

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 2

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	02										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	02									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: value < to the timer value of command 1.2.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	02	A5	03	XX	XX	XX				

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: value < to the timer value of command 1.2.3

## Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	00
	A4	01	02	A5	03	XX	XX	XX				

## Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[start timer 8]
		TIMER MANAGEMENT 1.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
_		MANAGEMENT 1.3.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 1 minute following reception of Terminal
		PENDING: TIMER	Response
		MANAGEMENT 1.3.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[ask value of timer 8]
8	NAT OINA	TIMER MANAGEMENT 1.3.2 TERMINAL RESPONSE: TIMER	[command parformed augocoefully]
0	$ME \rightarrow SIM$	MANAGEMENT 1.3.2	[command performed successfully]
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	Before timer expires!
	SIIVI - IVIE	PENDING: TIMER	Delote timer expires:
		MANAGEMENT 1.3.3	
10	$ME \rightarrow SIM$	FETCH	
11	IVIL 7 OIIVI	PROACTIVE COMMAND:	[reinitialize timer 8]
		TIMER MANAGEMENT 1.3.3	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.3.3	71
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	After 30 seconds following reception of
		PENDING: TIMER	Terminal Response
		MANAGEMENT 1.3.4	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 8]
		TIMER MANAGEMENT 1.3.4	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 1.3.4	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 20min

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
-	01	08	A5	03	00	02	00					

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
·	01	08										

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 01 h 00 min 00 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
·	01	08	A5	03	10	00	00					

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4	
	01	08											

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 and 1.3.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	80									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: value < to the timer value of command 1.3.1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	00
	A4	01	80	A5	03	XX	XX	XX				

### TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: value < to the timer value of command 1.3.3

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	00
	A4	01	08	A5	03	XX	XX	XX				

# Expected Sequence1.4 (TIMER MANAGEMENT, try to get the current value of a timer which is not started: action in contradiction with the current timer state)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
	1	PENDING: TIMER	
2	$ME \rightarrow SIM$	MANAGEMENT 1.4.1 FETCH	
3		PROACTIVE COMMAND:	[get current value from timer 1]
	1	TIMER MANAGEMENT 1.4.1	[Secounding value from times 1]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	1	MANAGEMENT 1.4.1A	state]
	1	Or	
	Ī	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1B	
5	SIM → M⊏	PROACTIVE COMMAND	
	Olivi → IVI⊏	PENDING: TIMER	
	1	MANAGEMENT 1.4.2	
6	$ME \to SIM$	FETCH	
7	1		[get current value from timer 2]
8	ME SOM	TIMER MANAGEMENT 1.4.2 TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	$ME \rightarrow SIM$	MANAGEMENT 1.4.2A	[action in contradiction with the current timer state]
	1	or	
	1	TERMINAL RESPONSE: TIMER	
_	014	MANAGEMENT 1.4.2B	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: TIMER	
	1	MANAGEMENT 1.4.3	
10	$ME \to SIM$	FETCH	
11		PROACTIVE COMMAND:	[get current value from timer 3]
	N	TIMER MANAGEMENT 1.4.3	
12	$ME \to SIM$	TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A	[action in contradiction with the current timer
	1	MANAGEMENT 1.4.3A lor	state]
	1	TERMINAL RESPONSE: TIMER	
	1	MANAGEMENT 1.4.3B	
13	$SIM \to ME$	PROACTIVE COMMAND	
	1	PENDING: TIMER MANAGEMENT 1.4.4	
14	$ME \rightarrow SIM$	FETCH	
15	<b>_</b> / JIIVI	-	[get current value from timer 4]
	1	TIMER MANAGEMENT 1.4.4	
16	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	1	MANAGEMENT 1.4.4A	state]
	1	or TERMINAL RESPONSE: TIMER	
	1	MANAGEMENT 1.4.4B	
13	$SIM \to ME$	PROACTIVE COMMAND	
	1	PENDING: TIMER	
14	$ME \rightarrow SIM$	MANAGEMENT 1.4.5 FETCH	
14 15	ıvı⊏ → SIM		[get current value from timer 5]
'5	1	TIMER MANAGEMENT 1.4.5	to
16	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
	1	MANAGEMENT 1.4.5A	state]
	1	or TERMINAL RESPONSE: TIMER	
	1	MANAGEMENT 1.4.5B	
. 1	1		ı

Step	Direction	MESSAGE / Action	Comments
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.4.6	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[get current value from timer 6]
		TIMER MANAGEMENT 1.4.6	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.6A	state]
		or	
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.6B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
1 11	NAT CINA	MANAGEMENT 1.4.7 FETCH	
14	$ME \rightarrow SIM$	. = . •	[not over at value from the set 7]
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7	[get current value from timer 7]
16	NAT CINA	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
10	IVIE -> SIIVI	MANAGEMENT 1.4.7A	state]
		or	State
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.7B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	J.III / IVIL	PENDING: TIMER	
		MANAGEMENT 1.4.8	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[get current value from timer 8]
		TIMER MANAGEMENT 1.4.8	-
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.4.8A	state]
		or	
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.4.8B	

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	01										ŀ

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	01									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TL	V: 81	1 03	01	27	02	82	02	82	81	83	01	24	l
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### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	02										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME

357

Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	02									

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-T	_V: 81	03	01	27	02	82	02	82	81	83	01	24	l
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## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	0.3										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	03									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24	
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## PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	04										

## TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
·	A4	01	04									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

Е	BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24	
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#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
<u> </u>	01	05										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
_	A4	01	05									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
· <u> </u>	01	06										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	06									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6B

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

В	BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24	
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#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	07										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

#### Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	07									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get the current value of the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	D0	0C	81	03	01	27	02	82	02	81	82	A4
	01	80										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

BER-TLV:	81	03	01	27	02	82	02	82	81	83	01	24
	A4	01	08									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT
Command qualifier: get current value from the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TI	V: 81	03	01	27	02	82	02	82	81	83	01	24	
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# Expected Sequence1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND:	[deactivate timer 1]
		TIMER MANAGEMENT 1.5.1	
4	$ME \rightarrow SIM$		[action in contradiction with the current timer
		MANAGEMENT 1.5.1A	state]
		or ITERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.1B	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	OIIVI 7 IVIE	PENDING: TIMER	
		MANAGEMENT 1.5.2	
6	$ME \rightarrow SIM$	FETCH	
7		PROACTIVE COMMAND:	[deactivate timer 2]
		TIMER MANAGEMENT 1.5.2	
8	$ME \rightarrow SIM$		[action in contradiction with the current timer
		MANAGEMENT 1.5.2A	state]
		OF	
		TERMINAL RESPONSE: TIMER IMANAGEMENT 1.5.2B	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.5.3	
10	$ME \rightarrow SIM$	FETCH	
11		PROACTIVE COMMAND:	[deactivate timer 3]
		TIMER MANAGEMENT 1.5.3	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.3A	state]
		or TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.3B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
	CIIVI / IVIL	PENDING: TIMER	
		MANAGEMENT 1.5.4	
14	$ME \rightarrow SIM$	FETCH	
•	•	•	•

Step	Direction	MESSAGE / Action	Comments
15		PROACTIVE COMMAND:	[deactivate timer 4]
		TIMER MANAGEMENT 1.5.4	<u>-</u>
16	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.4A	state]
		or	
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.4B	
13	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.5.5	
14	$ME \rightarrow SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 5]
1		TIMER MANAGEMENT 1.5.5	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.5A	state]
		or	
		TERMINAL RESPONSE: TIMER	
40	OIM ME	MANAGEMENT 1.5.5B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: TIMER MANAGEMENT 1.5.6	
14	$ME \rightarrow SIM$		
15	IVIE → SIIVI	PROACTIVE COMMAND:	[deactivate timer 6]
13		TIMER MANAGEMENT 1.5.6	[ueacuvate unier o]
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
'0	IVIL -> SIIVI	MANAGEMENT 1.5.6A	state
		or	0.00.01
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.6B	
13	$SIM \to ME$	PROACTIVE COMMAND	
	_	PENDING: TIMER	
		MANAGEMENT 1.5.7	
14	$ME \to SIM$	FETCH	
15		PROACTIVE COMMAND:	[deactivate timer 7]
		TIMER MANAGEMENT 1.5.7	
16	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
		MANAGEMENT 1.5.7A	state]
		or	
		TERMINAL RESPONSE: TIMER	
40	0114	MANAGEMENT 1.5.7B	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: HMER	
14	ME CIM	MANAGEMENT 1.5.8 FETCH	
	$ME \rightarrow SIM$	PROACTIVE COMMAND:	[doactivate timer 8]
15		TIMER MANAGEMENT 1.5.8	[deactivate timer 8]
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[action in contradiction with the current timer
10	IVIE → SIIVI	MANAGEMENT 1.5.8A	state
		or	Jacob
		TERMINAL RESPONSE: TIMER	
		MANAGEMENT 1.5.8B	
			1

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1

## Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	01										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	01									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

#### Coding:

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	02										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	02									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

#### PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT Command qualifier: deactivate the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 3

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	03										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	03									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

	BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
--	----------	----	----	----	----	----	----	----	----	----	----	----	----

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	04										

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4A

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	04									

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 5

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
<u> </u>	01	05										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	05									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 6

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	06										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	06									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 7

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	07										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 7

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	07									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Coding:

BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT deactivate the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

BER-TLV:	D0	0C	81	03	01	27	01	82	02	81	82	A4
	01	08										

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8A

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24
	A4	01	08									

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8B

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: Deactivate Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Action in contradiction with the current timer state

BER-TLV:	81	03	01	27	01	82	02	82	81	83	01	24

# **Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
	NAT 0114	MANAGEMENT 1.6.1	
2 3	$ME \rightarrow SIM$	FETCH PROACTIVE COMMAND:	Itimer 11
3		TIMER MANAGEMENT 1.6.1	[timer 1]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
	WE / OW	MANAGEMENT 1.6.1	[teenmana penemica eacestemy]
5	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.6.2	
6	$ME \rightarrow SIM$	FETCH	Itima v Ol
7		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2	[timer 2]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
	WE 7 OIW	MANAGEMENT 1.6.2	[command pomential addressed any]
9	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
4.0		MANAGEMENT 1.6.3	
10	$ME \rightarrow SIM$	FETCH	[timor 2]
11		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3	[timer 3]
12	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
'-	7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MANAGEMENT 1.6.3	[
13	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.6.4	
14	$ME \rightarrow SIM$	FETCH	r: 43
15		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4	[timer 4]
16	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
	IVIL → SIIVI	MANAGEMENT 1.6.4	[bonninana penonnea saccessiany]
17	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.6.5	
18	$ME \rightarrow SIM$	FETCH	Itimaa 51
19		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5	[timer 5]
20	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
	IVIL 7 OIIVI	MANAGEMENT 1.6.5	[berninana perientica eaccestrany]
21	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.6.6	
22	$ME \rightarrow SIM$	FETCH	[timer 6]
23		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6	[timer 6]
24	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
- '	/ 0	MANAGEMENT 1.6.6	F
25	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
	NAT 011:	MANAGEMENT 1.6.7	
26	$ME \to SIM$	FETCH	[times 7]
27		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7	[timer 7]
28	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
-	IVIL 7 OIIVI	MANAGEMENT 1.6.7	[25gp://distribut.com/dis
29	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 1.6.8	
30	$ME \rightarrow SIM$	FETCH	Itims on Ol
31		PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8	[timer 8]
32	$ME \to SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
02	IVIL -> OIIVI	MANAGEMENT 1.6.8	[25nana ponomina adocessiany]
			l .

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 2

Timer value

Value of timer: 5 s

#### Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	02	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 2

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	02									

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 3

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
·	01	03	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 3

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	03									

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 4

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	04	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 4

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
_	A4	01	04									

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 5

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	05	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 5

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	05									

## PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 6

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	06	A5	03	00	00	50					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 6

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	06									

#### PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM Destination device: ME

Timer identifier

Identifier of timer: 7

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4	
	01	07	A5	03	00	00	50						

#### TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 7

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	Α4	01	07									

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number:

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 8

Timer value

Value of timer: 5 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	80	A5	03	00	00	50					

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 8

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	08									

27.22.4.21.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

27.22.4.21.2 ENVELOPE TIMER EXPIRATION (normal)

27.22.4.21.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.21.2.2 Conformance requirement

The ME shall support the ENVELOPE (TIMER EXPIRATION) command as defined in the following technical specifications:

• 3GPP TS 11.14 clause 4.10, clause 10.1 and clause 10.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.21, clause 6.8, clause 12.6, clause 12.7, clause 12.37 and clause 12.38.

#### 27.22.4.21.2.3 Test purpose

To verify that the ME shall pass the identifier of the timer that has expired and its value using the ENVELOPE (TIMER EXPIRATION) command, when a timer previously started in a TIMER MANAGEMENT proactive command expires.

27.22.4.21.2.4 Method of test

27.22.4.21.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The timer 1 is not started.

When the SIM is busy when the envelope TIMER EXPIRATION is sent, either the ME retries periodically to send the envelope, either it waits for a TERMINAL RESPONSE processed by the SIM with status '90 00'.

If the ME waits for a TR with status '90 00', the ME manufacturer shall specify how many TERMINAL RESPONSES with status '90 00' are expected before sending the TIMER EXPIRATION envelope.

#### 27.22.4.21.2.4.2 Procedure

#### Expected Sequence 2.1 (TIMER EXPIRATION, pending proactive SIM command)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND: TIMER	[timer 1]
		MANAGEMENT 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: TIMER	[command performed successfully]
		MANAGEMENT 2.1.1	
5	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
		2.1.1	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND	[response to envelope is "91 xx"]
		PENDING: MORE TIME X.1(or an	
		other SAT command tested before	
		to ensure it is properly supported	
		by the mobile).	
7	$ME \to SIM$	FETCH	

#### PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 10 s

Coding:

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	00	01					

#### TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
·	A4	01	01									

## **ENVELOPE: TIMER EXPIRATION 2.1.1**

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier
Timer 1

Timer value

Hour: '00' Minute: '00' Second: '10'  $\pm$  1 s

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

# **Expected Sequence 2.2A (TIMER EXPIRATION, SIM application toolkit busy)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 2.2.1	
2	$ME \rightarrow SIM$	_	
3			[timer 1]
		MANAGEMENT 2.2.1	
4	$ME \rightarrow SIM$		[command performed successfully]
		MANAGEMENT 2.2.1	
5	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
		2.2.1A	
6	$SIM \rightarrow ME$	PROACTIVE SIM SESSION BUSY	[SIM is busy; response to the envelope = "93 00"]
			[SIM is busy during 10 seconds, the ME retries the sending of the envelope until it is
_		ENVIOLOGE TIMES EVOIDATION	accepted]
7	ME → SIM	ENVELOPE: TIMER EXPIRATION 2.2.1B	
8	$SIM \to ME$	PROACTIVE SIM SESSION BUSY	[SIM is busy, response to the envelope = "93 00"]
9	$ME \to SIM$	ENVELOPE: TIMER EXPIRATION	
		2.2.1C	
10	$SIM \to ME$	PROACTIVE SIM SESSION	[SIM is not busy]
		ENDED	

Or:

## **Expected Sequence 2.2B (TIMER EXPIRATION, SIM application toolkit busy)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: TIMER	
		MANAGEMENT 2.2.1	
2	$ME \to SIM$		
3			[timer 1]
4	ME CIM	MANAGEMENT 2.2.1 TERMINAL RESPONSE: TIMER	[command performed successfully]
4	IVIE → SIIVI	MANAGEMENT 2.2.1	[command performed successfully]
5	MF → SIM	ENVELOPE: TIMER EXPIRATION	
	IVIL 7 OIIVI	2.2.1A	
6	$SIM \rightarrow ME$	RESPONSE TO THE ENVELOPE	[SIM is busy; response to the envelope = "93
			00"]
			[SIM is busy during 10 sec, the ME may retry
			to send the envelope. After one (or several)
			answer(s) 93 00, the ME waits for a
			TERMINAL RESPONSE processed by the SIM with status "90 00"]
7	$ME \rightarrow SIM$	STATUS	[SIM is not busy]
8		Response to the STATUS	[SW1/SW2=91 xx]
	OIIII 7 IVIE	command	
9	$ME \rightarrow SIM$	PROACTIVE COMMAND	
		PENDING	
10	$SIM \rightarrow ME$		
		PROACTIVE COMMAND: e.g.	
4.4		MORE TIME 2.2.2	f
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: e.g. TIMER MANAGEMENT 2.2.2	[command performed successfully]
12	$SIM \rightarrow MF$	TIMER MANAGEMENT 2.2.2	[SW1/SW2 = 90 00]
12			Steps 7→12 shall be repeated (X-1) times if
			the ME manufacturers specifies that the ME
			waits for X TERMINAL RESPONSES with
			status 90 00 to send the TIMER EXPIRATION
			envelope.
13	$ME \rightarrow SIM$	ENVELOPE: TIMER EXPIRATION	
		2.2.1B	
14		PROACTIVE SIM SESSION	
		ENDED	

## PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number: 1

Command type: TIMER MANAGEMENT

Command qualifier: start the Timer

Device identities

Source device: SIM
Destination device: ME

Timer identifier

Identifier of timer: 1

Timer value

Value of timer: 0 h 0 min 30 s

BER-TLV:	D0	11	81	03	01	27	00	82	02	81	82	A4
	01	01	A5	03	00	00	03					

TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1

Logically:

Command details

Command number:

TIMER MANAGEMENT Command type:

start the Timer Command qualifier:

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Timer identifier

Identifier of timer: 1

Coding:

BER-TLV:	81	03	01	27	00	82	02	82	81	83	01	00
	A4	01	01									

**ENVELOPE: TIMER EXPIRATION 2.2.1A** 

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier

Timer 1

Timer value

'00' Hour: Minute: '00' Second: '30' ± 1 s

Coding:

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

**ENVELOPE: TIMER EXPIRATION 2.2.1B** 

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier

Timer 1 Timer value

Hour:

'00' Minute: '00'

Second: ≥ timer in clause 2.2.1A

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

**ENVELOPE: TIMER EXPIRATION 2.2.1C** 

Logically:

Device identities

Source device: ME Destination device: SIM

Timer identifier Timer 1 Timer value

> Hour: '00' Minute: '00'

Second:  $\geq$  timer in 2.2.1B

Coding:

BER-TLV:	D7	0C	82	02	82	81	A4	01	01	A5	03	00
	00	XX										

PROACTIVE COMMAND: MORE TIME 2.2.2

Logically:

Command details

Command number: 1

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Coding:

	BER-TLV:	D0	09	81	03	01	02	00	82	02	81	82
--	----------	----	----	----	----	----	----	----	----	----	----	----

TERMINAL RESPONSE: MORE TIME 2.2.2

Logically:

Command details

Command number:

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	02	00	82	02	82	81	83	01	00

27.22.4.21.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.2B.

#### 27.22.4.22 SET UP IDLE MODE TEXT

## 27.22.4.22.1 SET UP IDLE MODE TEXT (normal)

#### 27.22.4.22.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.22.1.2 Conformance requirement

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.22, clause 6.6.22, clause 6.4.16, clause 6.6.16, clause 11.6, clause 6.8, clause 11, clause 11.1, clause 12.25, clause 6.4.7 and clause 6.6.13.

Additionally the ME shall support the REFRESH proactive SIM facility as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.1, clause 6.4.7, clause 6.6.13, clause 6.11, clause 12.6, clause 12.12, clause 13.4 and clause 14.

#### 27.22.4.22.1.3 Test purpose

To verify that the text passed to the ME is displayed as idle mode text.

#### 27.22.4.22.1.4 Method of test

#### 27.22.4.22.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.22.1.4.2 Procedure

## Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		IDLE MODE TEXT 1.1.1	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6			Only if idle screen not already available
7	$ME \to USER$	Display "Idle Mode Text"	

#### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.1.1

## Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Idle Mode Text"

Coding:

BER-TLV:	D0	1A	81	03	01	28	00	82	02	81	82	8D
	0F	04	49	64	6C	65	20	4D	6F	64	65	20
	54	65	78	74								

#### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00
DEIX IEV.	0.	00	0.		00	02	02	02	0.	00	0.	00

## Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Idle Mode Text]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5		Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SIM \to ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.2.1	
8	$ME \to SIM$	FETCH	
9	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[Idle Mode Text]
		IDLE MODE TEXT 1.2.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.2.1	
11	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
12		Select idle screen	Only if idle screen not already available
13	$ME \to USER$	Display "Toolkit Test"	

## PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.2.1

Logically:

Command details

Command number:

Command type: SETUP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data Text: "Toolkit Test"

Coding:

BER-TLV:	D0	18	81	03	01	28	00	82	02	81	82	8D
	0D	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74										

#### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.2.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

## Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SET UP IDLE MODE TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5		Select idle screen	Only if idle screen not already available
6		Display "Idle Mode Text"	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SET UP IDLE MODE TEXT 1.3.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[Remove idle mode text]
		IDLE MODE TEXT 1.3.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.3.1	
11	$SIM \rightarrow ME$	PROACTIVE SIM SESSION ENDED	
12		Select idle screen	Only if idle screen not already available
13	$ME \rightarrow USER$	Display idle screen / "Idle Mode Text"	
		not to be displayed	

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number: 1

Command type: SETUP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM Destination device: ME

Text String: zero length TLV

Coding:

BER-TLV:	D0	0B	81	03	01	28	00	82	02	81	82	8D
·	00											

#### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

DED TIV	0.4	02				02			0.4	0.2	- 4	
BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# **Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
5	USER → ME	Select idle screen	Only if idle screen not already available
6	ME → USER	Display "Idle Mode Text"	only in tale dereem net alleday available
7	SS → ME	SMS PP 1.4.1	[Display immediate SMS]
8	ME → USER	Display "Test Message"	[Siopiay illimodiate citie]
9	USER → ME	Clear display and select idle	
	OOLIK 7 WIL	screen	
10	ME → USER		
11	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: DISPLAY TEXT 1.4.1	
12	$ME \to SIM$	FETCH	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[Normal priority, wait for user to clear
		DISPLAY TEXT 1.4.1	message, unpacked, 8 bit data]
14	$ME \rightarrow USER$	Display "Toolkit Test 1"	
15	$USER \rightarrow ME$	Clear Message	
16	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		DISPLAY TEXT 1.4.1	
17		Display "Idle Mode Text"	
18	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: PLAY TONE 1.4.1	
19	$ME \rightarrow SIM$	FETCH	
20	$SIM \rightarrow ME$	PROACTIVE COMMAND: PLAY	
21	ME LICED	TONE 1.4.1	
21	ME → USER	Display "Dial Tone"	
		Play a standard supervisory dial	
		tone through the external ringer for	
		a duration of 5 s	
22	$ME \rightarrow SIM$	TERMINAL RESPONSE: PLAY	[Command performed successfully]
	/ 5	TONE 1.4.1	, , , , , , , , , , , , , , , , , , , ,
23	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
24	$ME \rightarrow USER$	Display "Idle Mode Text"	

## SMS-PP 1.4.1

Logically:

SMS TPDU	
TP-MTI	SMS-SUBMIT
TP-RD	Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF	TP-VP field not present
TP-RP	TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI	The TP-UD field contains only the short message
TP-SRR	A status report is not requested
TP-MR	"00"
TP-DA	
TON	International number
NPI	"ISDN / telephone numbering plan"
Address value	"012345678"
TP-PID	"00"
TP-DCS	
Message coding	8-bit data
Message class	class 0

TP-UDL 12

TP-UD "Test Message"

Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	00	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### PROACTIVE COMMAND: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
Destination device: Display

**Text String** 

Data coding scheme: unpacked, 8 bit data
Text: "Toolkit Test 1"

Coding:

BER-TLV:	D0	1A	81	03	01	21	80	82	02	81	02	8D
	0F	04	54	6F	6F	6C	6B	69	74	20	54	65
	73	74	20	31								

#### TERMINAL RESPONSE: DISPLAY TEXT 1.4.1

Logically:

Command details

Command number:

Command type: DISPLAY TEXT

Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 00

### PROACTIVE COMMAND: PLAY TONE 1.4.1

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Earpiece
Alpha identifier: "Dial Tone"

TONe: Standard supervisory tones: dial tone

Duration

Time unit: Seconds
Time interval: 5

Coding:

BER-TLV:	D0	1B	81	03	01	20	00	82	02	81	03	85
	09	44	69	61	6C	20	54	6F	6E	65	8E	01
	01	84	02	01	05							

TERMINAL RESPONSE: PLAY TONE 1.4.1

Logically:

Command details

Command number: 1

Command type: PLAY TONE

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	20	00	82	02	82	81	83	01	00
DLIX-ILV.	01	00	01	20	00	02	02	02	01	00	01	00

## **Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	["Idle Mode Text"]
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6		Display "Idle Mode Text"	
7	$USER \rightarrow ME$	Power off ME	
8	$ME \Leftrightarrow SIM$	GSM TERMINATION	
		PROCEDURE	
9	$USER \to ME$	Power on ME	
10	$ME \Leftrightarrow SIM$	GSM ACTIVATION PROCEDURE	
11	$ME \Leftrightarrow SIM$	SIM INITIALIZATION	
12	$USER \rightarrow ME$	Select idle screen	Only if idle screen not already available
13	$ME \rightarrow USER$	Display idle screen / "Idle Mode	
		Text" not to be displayed	

## **Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with SIM Initialization)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[Idle Mode Text]
		PENDING: SET UP IDLE MODE	
		TEXT 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 1.1.1	
5	$USER \to ME$	Select idle screen	Only if idle screen not already available
6	$ME \rightarrow USER$	Display "Idle Mode Text"	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: REFRESH 1.6.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[SIM Initialization]
		REFRESH 1.6.1	
10	$ME \Leftrightarrow SIM$	SIM INITIALIZATION	
11	$USER \to ME$	Select idle screen	Only if idle screen not already available
12	$ME \rightarrow USER$	Display idle screen / "Idle Mode	
		Text" not to be displayed	
13	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		REFRESH 1.6.1A	
		or	
		TERMINAL RESPONSE:	[Command performed successfully with
		REFRESH 1.6.1B	additional files read]
14	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: REFRESH 1.6.1

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: SIM
Destination device: ME

Coding:

TERMINAL RESPONSE: REFRESH 1.6.1A

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	01	03	82	02	82	81	83	01	00
D_::	<b>.</b>	00	<b>.</b>	<b>.</b>	00	_ <del>_</del>	~ <u> </u>	- C	, o.			

TERMINAL RESPONSE: REFRESH 1.6.1B

Logically:

Command details

Command number: 1

Command type: REFRESH
Command qualifier: SIM Initialization

Device identities

Source device: ME Destination device: SIM

Result

General Result: REFRESH performed with additional EFs read

Coding:

BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 03

## **Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[large text string]
		PENDING: SET UP IDLE MODE	
		TEXT 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 1.7.1	
4	$ME \rightarrow SIM$		[command performed successfully]
		IDLE MODE TEXT 1.7.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "The SIM shall supply a	[274 characters]
		text string, which shall be	
		displayed by the ME as an idle	
		mode text if the ME is able to do it.	
		The presentation style is left as an	
		implementation decision to the ME	
		manufacturer. The idle mode text	
		shall be displayed in a manner that	
		ensures that ne"	

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

**Text String** 

Data coding scheme: packed, SMS default alphabet

Text: "The SIM shall supply a text string, which shall be displayed by the ME as an idle

mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be

displayed in a manner that ensures that ne"

Coding:

BER-TLV:	D0	81	FD	81	03	01	28	00	82	02	81	82
	8D	81	F1	00	54	74	19	34	4D	36	41	73
	74	98	CD	06	CD	EB	70	38	3B	0F	0A	83
	E8	65	3C	1D	34	A7	CB	D3	EE	33	0B	74
	47	A7	C7	68	D0	1C	1D	66	В3	41	E2	32
	88	9C	9E	C3	D9	E1	7C	99	0C	12	E7	41
	74	74	19	D4	2C	82	C2	73	50	D8	0D	4A
	93	D9	65	50	FB	4D	2E	83	E8	65	3C	1D
	94	36	83	E8	E8	32	A8	59	04	A5	E7	A0
	B0	98	5D	06	D1	DF	20	F2	1B	94	A6	BB
	A8	E8	32	08	2E	2F	CF	CB	6E	7A	98	9E
	7E	BB	41	73	7A	9E	5D	06	A5	E7	20	76
	D9	4C	07	85	E7	A0	B0	1B	94	6E	C3	D9
	E5	76	D9	4D	0F	D3	D3	6F	37	88	5C	1E
	A7	E7	E9	B7	1B	44	7F	83	E8	E8	32	A8
	59	04	B5	C3	EE	BA	39	3C	A6	D7	E5	65
	B9	0B	44	45	97	41	69	32	BB	0C	6A	BF
	C9	65	10	BD	8C	A7	83	E6	E8	30	9B	0D
	12	97	41	E4	F4	1C	CE	0E	E7	CB	64	50
	DA	0D	0A	83	DA	61	B7	BB	2C	07	D1	D1
	61	3A	A8	EC	9E	D7	E5	E5	39	88	8E	0E
	D3	41	EE	32								

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 1.7.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03	01 28	00 82	02	82 8	1 83	01	00
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27.22.4.22.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.7.

27.22.4.22.2 SET UP IDLE MODE TEXT (Icon support)

27.22.4.22.2.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.2.2 Conformance requirement

27.22.4.22.2.3 Test purpose

To verify that the ME text and / or icon passed to the ME is displayed by the ME as an idle mode text.

To verify that the icon identifier provided with the text string can replace the text string or accompany it.

To verify that if both an alpha identifier or text string, and an icon are provided with a proactive command, and both are requested to be displayed, but the ME is not able to display both together on the screen, then the alpha identifier or text string takes precedence over the icon.

To verify that if the SIM provides an icon identifier with a proactive command, then the ME shall inform the SIM if the icon could not be displayed by sending the general result "Command performed successfully, but requested icon could not be displayed".

To verify that if the ME receives an icon qualifier with bit 1 set to 0, meaning "an alpha identifier or text string related to the icon may be displayed together with the icon by the ME", and no alpha identifier / text string is given by the SIM, than the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4 Method of test

27.22.4.22.2.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.22.2.4.2 Procedure

### Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	·
		TEXT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.1.1	
4	$ME \to SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.1.1A	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6		Select idle screen	Only if idle screen not already available
7	$ME \to USER$	Display the icon	

#### PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.1.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM Destination device: ME

Text String: "Idle text"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	00	01									

### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1A

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00
	0.	00		20	00	02	02	02	0.	00	0.	00

# Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	·
		TEXT 2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.1.1	
4	$ME \rightarrow SIM$		[Command performed successfully, but
		IDLE MODE TEXT 2.1.1B	requested icon could not be displayed]
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6			Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle text" without the icon	

# TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	l 01	28	00	82	02	82	l 81	83	01	04
	• .						~-		<b>.</b>			• .

# Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is not self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.2.1A	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display icon #1 and "Idle text"	

# PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.2.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME
Text String: "Idle text"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	01	01									

# TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1A

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

# Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is not self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.2.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully, but
		IDLE MODE TEXT 2.2.1B	requested icon could not be displayed]
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	·
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle text" without the icon	

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.2.1B

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

	-											
BER-TLV:	1 01	U.3	I 01	20	00	02	$^{\circ}$	22	1 01	0.2	Ι Λ1	Π4
IDENTILV.		เบอ		1 20	1 00	1 02	1 02	02		00	1 01	1 04

# Expected Sequence 2.3A (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		IDLE MODE TEXT 2.3.1A	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display the icon	

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.3.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME
Text String: "Idle text"

Icon identifier

Icon qualifier: icon is self-explanatory
Icon identifier: <record 2 in EF IMG>

#### Coding:

BER-TLV:	D0	19	81	03	01	28	00	82	02	81	82	8D
	0A	04	49	64	6C	65	20	74	65	78	74	9E
	02	00	02									

#### TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1A

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81	83	01	00	
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# Expected Sequence 2.3B (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is self-explanatory]
		PENDING: SET UP IDLE MODE	
		TEXT 2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.3.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[requested icon could not be displayed]
		IDLE MODE TEXT 2.3.1B	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
6	$USER \to ME$	Select idle screen	Only if idle screen not already available
7	$ME \rightarrow USER$	Display "Idle text" without the icon	

# TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.3.1B

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

# Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, no text string)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Icon is not self-explanatory, no text string]
		PENDING: SET UP IDLE MODE	
		TEXT 2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 2.4.1	
4	$ME \to SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 2.4.1	
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM Destination device: ME

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV:	D0	0D	81	03	01	28	00	82	02	81	82	9E
	02	01	01									

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 2.4.1

Logically:

Command details

Command number: 1

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command data not understood by ME

Coding:

E	BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	32	l
---	----------	----	----	----	----	----	----	----	----	----	----	----	----	---

27.22.4.22.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1A to 2.4.

# 27.22.4.22.3 SET UP IDLE MODE TEXT (UCS2 support)

27.22.4.22.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.22.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

• ISO/IEC 10646 [17].

27.22.4.22.3.3 Test purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test

27.22.4.22.3.4.1 Initial conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.22.3.4.2 Procedure

# Expected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	["Hello" in Russian]
		PENDING: SET UP IDLE MODE	
		TEXT 3.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		IDLE MODE TEXT 3.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		IDLE MODE TEXT 3.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
6		Select idle screen	Only if idle screen not already available
7	$ME \to USER$	Display " ЗДРАВСТВУЙТЕ"	["Hello" in Russian]

# PROACTIVE COMMAND: SET UP IDLE MODE TEXT 3.1.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Text String

Data coding scheme: UCS2 (16bit)

Text: "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	24	81	03	01	28	00	82	02	81	82	8D
_	19	08	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15										

TERMINAL RESPONSE: SET UP IDLE MODE TEXT 3.1.1

Logically:

Command details

Command number:

Command type: SET UP IDLE MODE TEXT

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

_													
	BER-TLV:	81	03	01	28	00	82	02	82	81	83	01	00

#### 27.22.4.22.3.5 Test requirement

The ME shall operate in the manner defined in expected sequence 3.1.

#### 27.22.4.23 RUN AT COMMAND

#### 27.22.4.23.1 RUN AT COMMAND (normal)

#### 27.22.4.23.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in:

- 3GPP TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- 3GPP TS 27.007 [18].

#### 27.22.4.23.1.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

# 27.22.4.23.1.4 Method of test

#### 27.22.4.23.1.4.1 Initial conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

#### 27.22.4.23.1.4.2 Procedure

# Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[no alpha identifier, request IMSI]
		AT COMMAND 1.1.1	
4		The ME may give information to	
		the user concerning what is	
		happening	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	Response containing IMSI]

# PROACTIVE SIM COMMAND: RUN AT COMMAND 1.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Coding:

BER-TLV:	D0	12	81	03	01	34	00	82	02	81	82	A8
	07	41	54	2B	43	49	4D	49				

# TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00
·	Α9	08	08	0.9	10	10	32	54	76	98		

# Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[null data alpha identifier, request IMSI]
		AT COMMAND 1.2.1	
4	ME	The ME should not give any	
		information to user on the fact that	
		the ME is performing an AT	
		command	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	Response containing IMSI]

# PROACTIVE SIM COMMAND: RUN AT COMMAND 1.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier null data object

AT Command

AT Command string: "AT+CIMI"

Coding:

BER-TLV:	D0	14	81	03	01	34	00	82	02	81	82	85
·	00	A8	07	41	54	2B	43	49	4D	49		

# Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[alpha identifier, request IMSI]
		AT COMMAND 1.3.1	
4	$ME \rightarrow USER$	Display "Run AT Command"	
7	$ME \to SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 1.1.1	Response containing IMSI]

#### PROACTIVE SIM COMMAND: RUN AT COMMAND 1.3.1

Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Alpha Identifier

Alpha Identifier "Run AT Command"

AT Command

AT Command string: "AT+CIMI"

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
_	0E	52	75	6E	20	41	54	20	43	6F	6D	6D
	61	6E	64	A8	07	41	54	2B	43	49	4D	49

#### 27.22.4.23.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.4.23.2 RUN AT COMMAND (Icon support)

27.22.4.23.2.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in:

- 3GPP TS 11.14 [15] clause 6.4.23, clause 6.6.23, clause 5.2, clause 6.8, clause 12.6, clause 12.7, clause 12.2, clause 12.40, clause 12.31 and clause 12.41.
- 3GPP TS 27.007 [18].

# 27.22.4.23.2.3 Test purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.23.2.4 Method of test

#### 27.22.4.23.2.4.1 Initial conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

The ME screen shall be in its normal stand-by display.

#### 27.22.4.23.2.4.2 Procedure

#### Expected Sequence 2.1A (RUN AT COMMAND, basic icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, self-explanatory, request IMSI]
		AT COMMAND 2.1.1	
4	$ME \rightarrow USER$	Display BASIC ICON without the	
		alpha identifier	
5	$ME \rightarrow SIM$		[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

# PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{icon is self-explanatory} \\ \mbox{Icon identifier:} & \mbox{record 1 in } EF_{(IMG)} \\ \end{array}$ 

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	07	41	54	2B	43	49	4D	49	9E	02	00	01

# TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

AT Response

AT Response string: IMSI

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	00

Α9	80	80	09	10	10	32	54	76	98	

# Expected Sequence 2.1B (RUN AT COMMAND, basic icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, self-explanatory, request IMSI]
		AT COMMAND 2.1.1	
4	$ME \rightarrow USER$	Display "Basic Icon" without the	
		BASIC-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result:

Command performed successfully, but requested icon could not be displayed

AT Response

AT Response string: IMSI

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	04
	A9	80	80	09	10	10	32	54	76	98		

# Expected Sequence 2.2A (RUN AT COMMAND, colour icon self explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, self-explanatory, request
		AT COMMAND 2.2.1	IMSI]
4	$ME \rightarrow USER$	Display COLOUR-ICON without	
		the alpha identifier	
5	$ME \to SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

 $\begin{array}{ll} \hbox{Icon qualifier:} & \hbox{icon is self-explanatory} \\ \hbox{Icon identifier:} & \hbox{record 2 in } EF_{(IMG)} \\ \end{array}$ 

#### Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	A8
_	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	A8	07	41	54	2B	43	49	4D	49	9E	02	00
	02											

# Expected Sequence 2.2B (RUN AT COMMAND, colour icon self explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, self-explanatory, request
		AT COMMAND 2.2.1	IMSI]
4	$ME \rightarrow USER$	Display "Colour Icon" without the	
		COLOUR-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

# Expected Sequence 2.3A (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, non self-explanatory, request
		AT COMMAND 2.3.1	IMSI]
4	$ME \rightarrow USER$	Display "Basic Icon" and BASIC-	
		ICON	
7	$ME \rightarrow SIM$		[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Basic Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	22	81	03	01	34	00	82	02	81	82	85
	0A	42	61	73	69	63	20	49	63	6F	6E	A8
	07	41	54	2B	43	49	4D	49	9E	02	01	01

# Expected Sequence 2.3B (RUN AT COMMAND, basic icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[BASIC-ICON, non self-explanatory, request
		AT COMMAND 2.3.1	IMSI]
4	$ME \to USER$	Display "Basic Icon" without	
		BASIC-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

# Expected Sequence 2.4A (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, non self-explanatory,
		AT COMMAND 2.4.1	request IMSI]
4	$ME \to USER$	Display "Colour Icon" and	
		COLOUR-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed successfully, AT
		COMMAND 2.1.1A	response containing IMSI]

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

AT Command

AT Command string: "AT+CIMI"

Icon identifier:

Icon qualifier: icon is self-explanatory Icon identifier: record 2 in  $EF_{(IMG)}$ 

# Coding:

BER-TLV:	D0	23	81	03	01	34	00	82	02	81	82	85
	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	A8	07	41	54	2B	43	49	4D	49	9E	02	01
	02											

# Expected Sequence 2.4B (RUN AT COMMAND, colour icon non self-explanatory, request IMSI, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		2.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: RUN	[COLOUR-ICON, non self-explanatory,
		AT COMMAND 2.4.1	request IMSI]
4	$ME \rightarrow USER$	Display "Colour Icon" without	
		COLOUR-ICON	
5	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command performed but requested icon
		COMMAND 2.1.1B	could not be displayed, AT response
			containing IMSI]

# Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: RUN AT COMMAND	
		SS 2.5.1	
2	$ME \rightarrow SIM$	FETCH	
3			[BASIC-ICON, non self-explanatory]
		AT COMMAND 2.5.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: RUN AT	[Command data not understood by ME]
		COMMAND 2.5.1	

PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number: 1

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

AT Command

AT Command string: "AT+CIMI"

Icon identifier

Icon qualifier: icon is non self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	16	81	03	01	34	00	82	02	81	82	A8
· · · · · · · · · · · · · · · · · · ·	07	41	54	2B	43	49	4D	49	9E	02	01	01

#### TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details

Command number:

Command type: RUN AT COMMAND

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Result

General Result: Command data not understood by ME

Coding:

BER-TLV:	81	03	01	34	00	82	02	82	81	83	01	32

#### 27.22.4.23.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.5.

# 27.22.4.24 SEND DTMF

#### 27.22.4.24.1 SEND DTMF (Normal)

### 27.22.4.24.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

#### 27.22.4.24.1.3 Test purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the SIM using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that if an alpha identifier is provided by the SIM and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

#### 27.22.4.24.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

#### 27.22.4.24.1.4. 2 Procedure

# **Expected Sequence 1.1 (SEND DTMF, normal)**

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	CINA . NAT	simulator. PROACTIVE COMMAND	
4	$SIM \rightarrow ME$	PENDING: SEND DTMF 1.1.1	
5	$ME \rightarrow SIM$	FETCH	
6	/ / / / / / / / / / / / / / / / / / / /	PROACTIVE COMMAND: SEND	
	J	DTMF 1.1.1	
7	$ME \rightarrow USER$	May give information to the user	
		concerning what is happening.	
		Do not locally generate audible	
		DTMF tones and play them to the user.	
8	ME  o SS	Start DTMF 1.1	["1"]
9	ME → SS	Otal Divil 1.1	No DTMF sending for 3 seconds ±20%
10	ME → SS	Start DTMF 1.2	["2"]
11	ME → SIM	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 1.1.1	
12	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
13	$User \to ME$	End the call	

# PROACTIVE COMMAND: SEND DTMF 1.1.1

# Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

DTMF String: "1" pause "2"

# Coding:

BER-TLV:	D0	0D	81	03	01	14	00	82	02	81	83	AC
	02	C1	F2									

# Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE: SEND DTMF 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

DED TIV	0.4	00	0.4	4.4	00	0.2	00	0.0	0.4	0.2	Ω1	00
BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

# **Expected Sequence 1.2 (SEND DTMF, containing alpha identifier)**

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
_		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	$SIM \rightarrow ME$	simulator. PROACTIVE COMMAND	
4	SIIVI → IVIE	PENDING: SEND DTMF 1.2.1	
5	$ME \to SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
	0 / <u></u>	DTMF 1.2.1	
7	$ME \to USER$	Display "Send DTMF"	Alpha identifier
		Do not locally generate audible	
		DTMF tones and play them to the	
	ME 00	user.	FII 4 II 3
8	$ME \rightarrow SS$	Start DTMF 1.1 Start DTMF 1.2	["1"]
10	$ME \rightarrow SS$	Start DTMF 1.2	["2"] ["3"]
11	$ME \rightarrow SS$ $ME \rightarrow SS$	Start DTMF 1.4	[3] ["4"]
12	$ME \rightarrow SS$	Start DTMF 1.5	["5"]
13	$ME \rightarrow SS$	Start DTMF 1.6	["6"]
14	$ME \rightarrow SS$	Start DTMF 1.7	["7"]
15	$ME \rightarrow SS$	Start DTMF 1.8	["8"]
16	$ME \rightarrow SS$	Start DTMF 1.9	["9"]
17	$ME \rightarrow SS$	Start DTMF 1.10	["0"]
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
	,	DTMF 1.1.1	
19	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
20	$User \to ME$	End the call	

PROACTIVE COMMAND: SEND DTMF 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Send DTMF"

DTMF String: "1234567890"

Coding:

BER-TLV:	D0	1B	81	03	01	14	00	82	02	81	83	85
·	09	53	65	6E	64	20	44	54	4D	46	AC	05
	21	43	65	87	09							

Start DTMF 1.3

Logically:

DTMF String: "3"

Start DTMF 1.4

Logically:

DTMF String: "4"

Start DTMF 1.5

Logically:

DTMF String: "5"

Start DTMF 1.6

Logically:

DTMF String: "6"

Start DTMF 1.7

Logically:

DTMF String: "7"

Start DTMF 1.8

Logically:

DTMF String: "8"

Start DTMF 1.9

Logically:

DTMF String: "9"

Start DTMF 1.10

Logically:

DTMF String: "0"

# Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
4		simulator. PROACTIVE COMMAND	
4	$SIM \rightarrow ME$	PENDING: SEND DTMF 1.3.1	
5	ME  o SIM	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	Alpha identifier with null data object
	OIIVI 7 IVIL	DTMF 1.3.1	rupria idonimor marrian data object
7	$ME \rightarrow USER$	Do not give any information to the	
		user on the fact that the ME is	
		performing a SEND DTMF	
		command.	
		Do not locally generate audible	
		Do not locally generate audible DTMF tones and play them to the	
		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 30 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 1.1.1	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40		ENDED	
13	User $\rightarrow$ ME	End the call	

# PROACTIVE COMMAND: SEND DTMF 1.3.1

Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "" (null data object)

DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	13	81	03	01	14	00	82	02	81	83	85
	00	AC	06	C1	CC	CC	CC	CC	2C			

# Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Mobile is not in a speech call]
		PENDING: SEND DTMF 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		DTMF 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[ME currently unable to process command,
			not in speech call]
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

TERMINAL RESPONSE: SEND DTMF 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional information: Not in speech call

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	02	20
	07											

# 27.22.4.24.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences.

# 27.22.4.24.2 SEND DTMF (Display of icons)

27.22.4.24.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.24.2.2 Conformance requirement

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2, clause 12.44, clause 12.31 and clause 6.5.4.

#### 27.22.4.24.2.3 Test purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM command.

27.22.4.24.2.4 Method of test

27.22.4.24.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

The elementary files are coded as Toolkit default.

27.22.4.24.2.4.2 Procedure

# Expected Sequence 2.1A (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
_		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
7	SIIVI -> IVIE	PENDING: SEND DTMF 2.1.1	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
		DTMF 2.1.1	
7	$ME \rightarrow USER$	Display the BASIC-ICON	
		De not levelly nonorate avdible	
		Do not locally generate audible DTMF tones and play them to the	
		user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 2.1.1A	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
12	Llaar . ME	ENDED	
13	User $\rightarrow$ ME	End the call	

### PROACTIVE COMMAND: SEND DTMF 2.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Basic Icon"

DTMF String: "1" pause "2"

Icon identifier

Icon qualifier: icon is self-explanatory Icon identifier: record 1 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	1D	81	03	01	14	00	82	02	81	83	85
	0A	42	61	73	69	63	20	49	63	6F	6E	AC
	02	C1	F2	9E	02	00	01					

# DTMF Request 2.1.1

Logically:

DTMF String: \$DTMF\_2.1\$ = "C1 F2" (given as example)

TERMINAL RESPONSE: SEND DTMF 2.1.1A

Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	00

# Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	OINA NAT	simulator. PROACTIVE COMMAND	
4	$SIM \rightarrow ME$	PENDING: SEND DTMF 2.1.1	
5	$ME \rightarrow SIM$	FETCH	
6	SIM → ME	PROACTIVE COMMAND: SEND	[BASIC-ICON, self-explanatory]
	Olivi 7 IVIL	DTMF 2.1.1	
7	$ME \rightarrow USER$	Display "Basic Icon" without the	
		icon	
		Do not locally generate audible	
		DTMF tones and play them to the	
8	ME  o SS	user. Start DTMF 1.1	["1"]
9	MF	Start DTWF 1.1	No DTMF sending for 3 seconds ±20 %
10	ME → SS	Start DTMF 1.2	["2"]
11	ME → SIM	TERMINAL RESPONSE: SEND	[Command performed successfully, but
	I WIL 7 ONW	DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
13	$User \to ME$	End the call	

TERMINAL RESPONSE: SEND DTMF 2.1.1B

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	14	00	82	02	82	81	83	01	04
DEIX IEV.	0.	00	0.		00	02	02	02	0.	00	0 1	

### Expected Sequence 2.2A (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
	0114 145	simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1	
5	ME  o SIM	FETCH	
6		PROACTIVE COMMAND: SEND	[COLOUR-ICON]
0	$SIM \rightarrow ME$	DTMF 2.2.1	[COLOOR-ICON]
7	$ME \rightarrow USER$	Display the COLOUR-ICON	
		Do not locally generate audible	
		DTMF tones and play them to the	
_		user.	
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 2.1.1A	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
4.0	l	ENDED	
13	User $\rightarrow$ ME	End the call	

# PROACTIVE COMMAND: SEND DTMF 2.2.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Colour Icon"

DTMF String: "1" pause "2"

Icon identifier:

Icon qualifier: icon is self-explanatory

Icon identifier: record 2 in  $EF_{(IMG)}$ 

Coding:

BER-TLV:	D0	1E	81	03	01	14	00	82	02	81	83	85
_	0B	43	6F	6C	6F	75	72	20	49	63	6F	6E
	AC	02	C1	F2	9E	02	00	02				

# Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	$SIM \rightarrow MF$	PROACTIVE COMMAND	
7	SIIVI -> IVIE	PENDING: SEND DTMF 2.2.1	
5	$ME \to SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	[COLOUR-ICON]
		DTMF 2.2.1	-
7	$ME \rightarrow USER$	Display "Colour Icon" without the	
		icon	
		Do not locally gonorate audible	
		Do not locally generate audible DTMF tones and play them to the	
		user.	
8	$ME \rightarrow SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully, but
		DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
13	Lloor ME	ENDED End the call	
13	$User \to ME$	End the can	

# Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to "+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT message from the system simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DTMF 2.3.1	[Alpha identifier & BASIC-ICON, not self- explanatory]
7	ME → USER	Display "Send DTMF" and the BASIC-ICON	
		Do not locally generate audible DTMF tones and play them to the user.	

8	$ME \to SS$	Start DTMF 1.1	["1"]	l
9	ME		No DTMF sending for 3 seconds ±20 %	l
10	$ME \to SS$	Start DTMF 1.2	["2"]	l
11		TERMINAL RESPONSE: SEND DTMF 2.1.1A	[Command performed successfully]	
12	$SIM \to ME$	PROACTIVE SIM SESSION ENDED		
13	$User \to ME$	End the call		l

# PROACTIVE COMMAND: SEND DTMF 2.3.1

# Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send DTMF"
DTMF String: "1" pause "2"

Icon identifier:

Icon qualifier: icon is not self-explanatory

Icon identifier: record 1 in  $EF_{(IMG)}$ 

#### Coding:

BER-TLV:	D0	1C	81	03	01	14	00	82	02	81	83	85
·	09	53	65	6E	64	20	44	54	4D	46	AC	02
	C1	F2	9E	02	01	01						

# Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \rightarrow ME$	The ME receives the CONNECT	
		message from the system	
4	OINA NAT	simulator. PROACTIVE COMMAND	
4	$SIM \rightarrow ME$	PENDING: SEND DTMF 2.3.1	
5	$ME \rightarrow SIM$	FETCH	
6	SIM → ME	PROACTIVE COMMAND: SEND	[Alpha identifier & BASIC-ICON, not self-
	Olivi -> IVIL	DTMF 2.3.1	explanatory]
7	ME → USER	Display "Send DTMF" without the	5-1
		icon	
		Do not locally generate audible	
		DTMF tones and play them to the	
8	ME 00	USEr.	["4"]
9	$ME \rightarrow SS$ $ME$	Start DTMF 1.1	["1"]
10	ME → SS	Start DTMF 1.2	No DTMF sending for 3 seconds ±20% ["2"]
11		TERMINAL RESPONSE: SEND	Command performed successfully, but
11	$ME \rightarrow SIM$	DTMF 2.1.1B	requested icon could not be displayed]
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	requested foot could flot be displayed]
	CIIVI / IVIL	ENDED	
1	<u>I</u>	ı	ı

13 User → ME End the call

#### 27.22.4.24.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences.

### 27.22.4.24.3 SEND DTMF (UCS2 support)

27.22.4.24.3.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.24.3.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in:

• 3GPP TS 11.14 [15] clause 6.1, clause 6.4.24, clause 6.6.24, clause 12.12.2, clause 5.2, clause 12.6, clause 12.7, clause 12.2 and clause 12.44.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

• ISO/IEC 10646. [17].

# 27.22.4.24.3.3 Test purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.24.3.4 Method of test

27.22.4.24.3.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.24.3.4.2 Procedure

#### Expected Sequence 3.1 (SEND DTMF, successful, UCS2 text)

Step	Direction	MESSAGE / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SS$	The ME attempts to set up a call to	
		"+0123456789"	
3	$SS \to ME$	The ME receives the CONNECT	
		message from the system simulator.	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
•	OIM / ME	PENDING: SEND DTMF 3.1.1	
5	$ME \to SIM$	FETCH	
6	$SIM \to ME$	PROACTIVE COMMAND: SEND	
		DTMF 3.1.1	
7	$ME \rightarrow USER$	Display "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
8	$ME \to SS$	Start DTMF 1.1	["1"]
9	ME		No DTMF sending for 3 seconds ±20%
10	$ME \to SS$	Start DTMF 1.2	["2"]
11	$ME \to SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DTMF 3.1.1	
12	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
40		ENDED	
13	User $\rightarrow$ ME	End the call	

# PROACTIVE COMMAND: SEND DTMF 3.1.1

Logically:

Command details

Command number:

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network

Alpha Identifier

Text: "ЗДРАВСТВУЙТЕ" DTMF String: "1" pause "2"

Coding:

BER-TLV:	D0	28	81	03	01	14	00	82	02	81	83	85
	19	80	04	17	04	14	04	20	04	10	04	12
	04	21	04	22	04	12	04	23	04	19	04	22
	04	15	AC	02	C1	F2						

TERMINAL RESPONSE: SEND DTMF 3.1.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successful

Coding:

BER-TI V	81	03	01	14	00	82	02	82	81	83	01	00

#### 27.22.4.12.2.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.

# 27.22.4.25 LANGUAGE NOTIFICATION

# 27.22.4.25.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.25.2 Conformance Requirement

The ME shall conclude the command by sending TERMINAL RESPONSE (OK) to the SIM, as soon as possible after receiving the LANGUAGE NOTIFICATION proactive SIM command.

• 3GPP TS 11.14 clause 6.4.25 and clause 6.6.25.

# 27.22.4.25.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the LANGUAGE NOTIFICATION proactive SIM command.

#### 27.22.4.25.4 Method of Test

#### 27.22.4.25.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

### 27.22.4.25.4.2 Procedure

#### **Expected Sequence 1.1 (LANGUAGE NOTIFICATION)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	Language specified in the command is
		LANGUAGE NOTIFICATION 1.1.1	different from the one set on the mobile.
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		LANGUAGE NOTIFICATION 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	Language of ME may have been replaced by
		ENDED	the one specified in LANGUAGE
			NOTIFICATION 1.1.1

# PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.1.1

#### Logically:

Command details

Command number: 1

Command type: LANGUAGE NOTIFICATION
Command qualifier: "01" (specific language notification)

Device identities

Source device: SIM
Destination device: ME

Language

Language 'se'(Spanish)  $\rightarrow$  73 65

or 'de' → 64 65 (German) for instance: choose a language different from the one initially set on the ME to check the proper execution

of the command

Coding:

BER-TLV:	D0	0D	81	03	01	35	01	82	02	81	82	AD
	02	73	65									

#### TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.1.1

Logically:

Command details

Command number: 1

Command type: LANGUAGE NOTIFICATION

Command qualifier: "01"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

# **Expected Sequence 1.2 (LANGUAGE NOTIFICATION)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	Language specified in the command is
		LANGUAGE NOTIFICATION 1.1.1	different from the one set on the mobile.
4	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		LANGUAGE NOTIFICATION 1.1.1	
5	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LANGUAGE	
		NOTIFICATION 1.2.1	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND:	
		LANGUAGE NOTIFICATION 1.2.1	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE:	[Command performed successfully]
		LANGUAGE NOTIFICATION 1.2.1	
9	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	Check that initial language is set.
		ENDED	

# PROACTIVE COMMAND: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number: 1

Command type: LANGUAGE NOTIFICATION

Command qualifier: "00" (non specific language notification)

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	01	03	01	35	00	82	02	01	82
DER-ILV.	טט	US	01	03	UI	33	UU	02	02	01	02

#### TERMINAL RESPONSE: LANGUAGE NOTIFICATION 1.2.1

Logically:

Command details

Command number:

Command type: LANGUAGE NOTIFICATION

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	35	00	82	02	82	81	83	01	00

# 27.22.4.25.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 and 1.2.

#### 27.22.4.26 LAUNCH BROWSER

# 27.22.4.26.1 LAUNCH BROWSER (No session already launched)

#### 27.22.4.26.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, clause 12.49, clause 12.50, clause 12.15 and clause 12.31.

#### 27.22.4.26.1.3 Test purpose

To verify that when the ME is in idle state, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

#### 27.22.4.26.1.4 Method of test

#### 27.22.4.26.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

• the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")

With that default gateway we shall be able to access to an URL different from the default one.

• another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is in idle mode.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class:	02
Delay Class:	04
Reliability Class:	05
Peak throughput class:	05
Mean throughput class:	16
Packet data protocol:	02 (IP)

#### **GPRS** Parameters

Network access name:	TestGp.rs
User login:	UserLog
User password:	UserPwd

#### SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### 27.22.4.26.1.4.2 Procedure

# Expected Sequence 1.1 (LAUNCH BROWSER, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.1.1	if not already launched", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	
5	$USER \to ME$	The user may have to confirm the	[option: user confirmation]
		launch browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 1.1.1	
7	$ME \rightarrow SS$	The ME attempts to launch the	
		session with the default Wap	
		parameters and the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
9	USER $\rightarrow$ ME	The user verifies that the default	
		Wap session is properly	
		established.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.1.1

# Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Default URL"

# Coding:

BER-TLV:	D0	18	81	03	01	15	00	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

#### TERMINAL RESPONSE: LAUNCH BROWSER 1.1.1

# Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

# Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00
DEIX-IEV.	01	03	01	10	00	02	02	02	01	00	O I	00

# Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.2.1	
2	L / O	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to defined URL, "launch browser, if
		LAUNCH BROWSER 1.2.1	not already launched, alpha identifier
		N	length=0]
4	$ME \rightarrow USER$	No information should be	
5	LICED ME	displayed.	[antian, upor confirmation]
5	$USER \to ME$	The user may have to confirm the launch browser.	[option: user confirmation]
6	ME  o SIM	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
	IVIL → SIIVI	BROWSER 1.2.1	[Command penomied successfully]
7	ME→SS	The ME attempts to connect the	
	WE 700	URL specified in the LAUNCH	
		BROWSER command.	
8	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
9	$USER \to ME$	The user verifies that the URL is	
		properly connected.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM Destination device: ME

URL <a href="http://xxx.yyy.zzz">http://xxx.yyy.zzz</a> (note: this URL shall be different from the default URL, but it can

be reached from the gateway defined by default in the Wap parameters of the

mobile)

Alpha Identifier empty

Coding:

BER-TLV:	D0	1F	81	03	01	15	00	82	02	81	82	31
	12	68	74	74	70	3A	2F	2F	78	78	78	2E
	79	79	79	2E	7A	7A	7A	05	00			

# TERMINAL RESPONSE: LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

# Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode]
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.3.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.3.1	if not already launched, browser identity]
4	$ME \to USER$	ME may display a default message	
		of its own.	
5	$USER \to ME$	The user may confirm the launch	[option: user confirmation]
		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 1.3.1	
7	ME→SS	The ME attempts to connect the	
		default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
1		ENDED	

9	$USER \rightarrow ME$	The user verifies that the default	
		Wap session is properly	
		established.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

# PROACTIVE COMMAND: LAUNCH BROWSER 1.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
Browser Identity default
URL empty

Coding::

BER-TLV:	D0	0E	81	03	01	15	00	82	02	81	82	30
	01	00	31	00								

# TERMINAL RESPONSE: LAUNCH BROWSER 1.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

# Expected Sequence 1.4 (LAUNCH BROWSER, only GPRS bearer specified and gateway/proxy identity, GPRS supported by SS)

Step	Direction	MESSAGE / Action	Comments
0	ME		[the ME is in idle mode], GPRS supported by
			SS, GPRS supported by the ME and
			activated]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.4.1	if not already launched, 1 bearer specified,
			gateway/proxy id specified]
4	$ME \rightarrow USER$	ME may display a default message	
5	$USER \to ME$	The user may confirm the launch	[option: user confirmation]
		browser.	-

6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1	[Command performed successfully]
7	ME→SS	The ME attempts to connect the default URL using the requested bearer and proxy identity	
8	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
9	$USER \to ME$	The user verifies that the Wap session is properly established with the required bearer. Then he/she ends the navigation. The ME returns in idle mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty
Bearer GPRS

Gateway/Proxy id

DCSunpacked, 8 bits data

Text string abc.def.ghi (different from the default IP address)

Coding::

BER-TLV:	D0	1C	81	03	01	15	00	82	02	81	82	31
	00	32	01	03	0D	0C	04	61	62	63	2E	64
	65	66	2E	67	68	69						

#### TERMINAL RESPONSE: LAUNCH BROWSER 1.4.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

# Expected Sequence 1.5A (LAUNCH BROWSER, two bearers GPRS, CSD specified and activated at SS and ME, gateway/proxy id specified)

Step	Direction	MESSAGE / Action	Comments	
0	ME		[ME is in idle mode]	

1	$SIM \to ME$	PROACTIVE COMMAND PENDING: LAUNCH BROWSER	
2	$ME \to SIM$	1.5.1 FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: LAUNCH BROWSER 1.5.1	[connect to the default URL, "launch browser, if not already launched, several bearers, gateway/proxy id specified]
4	$ME \to USER$	ME may display a default message	
5	$USER \to ME$	The user may confirm the launch browser.	[option: user confirmation]
6	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 1.5.1	[Command performed successfully]
7	$ME \rightarrow SS$	The ME attempts to connect the default URL.	
8	$SIM \to ME$	PROACTIVE SIM SESSION ENDED	
9	$USER \to ME$		
	001.1 /	The user verifies that the Wap	
		session is properly established	
		with the required bearer that is first	
		in priority (GPRS). Then he/she	
		ends the navigation. The ME returns in idle mode.	
		i ne ivi⊨ returns in idie mode.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 1.5.1

## Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty
Bearer GPRS, CSD

Gateway/Proxy id

DCS 7 bits default alphabet

Text string abc.def.ghi (different from the default IP address)

# Coding::

BER-TLV:	D0	1C	81	03	01	15	00	82	02	81	82	31
	00	32	02	03	01	0D	0B	00	61	F1	D8	45
	2E	9B	5D	67	74	1A						

## TERMINAL RESPONSE: LAUNCH BROWSER 1.5.1

#### Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

BER-TLV:	81	03	01	15	00	82	02	82	81	83	01	00

# Expected Sequence 1.5B (LAUNCH BROWSER, two bearers GPRS, CSD specified and activated at SS, only CSD supported and activated by the ME, gateway/proxy id specified)

Step	Direction	MESSAGE / Action	Comments
0	ME		[ME is in idle mode]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 1.5.1	if not already launched", several bearers,
			gateway/proxy id specified]
4		ME asks for user confirmation	
5	$USER \to ME$	The user confirms the launch	
_		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
_		BROWSER 1.5.1	
7	ME→SS	The ME attempts to connect the default URL.	
8	CIM . ME	PROACTIVE SIM SESSION	
0	$SIM \rightarrow ME$	ENDED	
9	USER → ME	The user verifies that the Wap	
	OSLIN - IVIL	session is properly established	
		with the CSD bearer. Then he/she	
		ends the navigation.	
		The ME returns in idle mode.	

# Expected Sequence 1.5C (LAUNCH BROWSER, only CSD bearer specified and activated at SS, GPRS and CSD supported and activated by the ME, gateway/proxy id specified)

Step	Direction	MESSAGE / Action	Comments
0	ME		[ME is in idle mode]
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
			if not already launched", several bearers, gateway/proxy id specified]
4	ME LICED	ME asks for user confirmation	gateway/proxy id specified]
5			
5	$USER \to ME$	The user confirms the launch	
6	$ME \rightarrow SIM$	browser. TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
0	IVIE → SIIVI	BROWSER 1.5.1	[Command penomied successfully]
7	$ME \rightarrow SS$	The ME attempts to connect the	
		default URL.	
8	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	
9	$USER \to ME$	The user verifies that the Wap	
		session is properly established	
		with the CSD bearer. Then he/she	
		ends the navigation.	
		The ME returns in idle mode.	

#### 27.22.4.26.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.5

## 27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

#### 27.22.4.26.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

#### 27.22.4.26.2.3 Test purpose

To verify that when the ME is already busy in a Wap session, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

#### 27.22.4.26.2.4 Method of test

#### 27.22.4.26.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to a Wap gateway is required. The default Wap parameters (IP address, gateway/proxy identity, called number...) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

#### 27.22.4.26.2.4.2 Procedure

### Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap	[Browser is in use, the current session is not
	0114 145	session (not default URL).	secured]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: LAUNCH BROWSER	
		2.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
			browser", no null alpha id.]
4		ME displays the alpha identifier	
5	$USER \to ME$	The user confirms the launch	[user confirmation]
6	ME  o SIM	browser. TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
0	IVIE -> SIIVI	BROWSER 2.1.1	[Confinant performed successibility]
7	$ME { ightarrow} SS$	The ME does not close the existing	
		session and attempts to connect	
		the default URL.	
8	$SIM \to ME$	PROACTIVE SIM SESSION	
0	SIIVI → IVIE	ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 2.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Default URL"

#### Coding:

BER-TLV:	D0	18	81	03	01	15	02	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

#### TERMINAL RESPONSE: LAUNCH BROWSER 2.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00	

# Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap	[Browser is in use, the current session is not
		session (not default URL)	secured]
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		2.2.1	
2	/ / / / / / / / / / / / / / / / / / / /	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "close the
		LAUNCH BROWSER 2.2.1	existing browser session and launch new
			browser session", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier	
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 2.2.1	
7	ME→SS	The ME closes the existing	
		session and attempts to launch the	
		session with the default Wap	
		parameters and the default URL.	
8	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

Step	Direction	MESSAGE / Action	Comments
9	$USER \ \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL cannot be retrieved	
		(to verify the previous session has	
		been closed).	
		Then he/she does not end the	
		navigation.	

PROACTIVE COMMAND: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser sessionDevice identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Default URL"

Coding:

BER-TLV:	D0	18	81	03	01	15	03	82	02	81	82	31
	00	05	0B	44	65	66	61	75	6C	74	20	55
	52	4C										

#### TERMINAL RESPONSE: LAUNCH BROWSER 2.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: close the existing browser session and launch new browser session

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	03	82	02	82	81	83	01	00

# **Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)**

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap	[Browser is in use, the current session is not
		session (not default URL)	secured]
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: LAUNCH BROWSER	
		2.3.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "launch browser,
		LAUNCH BROWSER 2.3.1	if not already launched]
4	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH	[ME unable to process command - browser
		BROWSER 2.3.1	unavailable]
5	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

Step	Direction	MESSAGE / Action	Comments
6	$USER \ \to ME$	The user verifies that the default	
		URL has not been connected.	
		Then he/she ends the navigation.	
		The ME returns in idle mode.	

PROACTIVE COMMAND: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: SIM
Destination device: ME
URL empty

Coding:

BER-TLV:	D0	0B	81	03	01	15	00	82	02	81	82	31
	00											

TERMINAL RESPONSE: LAUNCH BROWSER 2.3.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER

Command qualifier: launch browser, if not already launched

Device identities

Source device: ME Destination device: SIM

Result

General Result: Launch browser generic error code

Additional data Browser unavailable

Coding:

BER-TLV:	81	03	01	15	00	82	02	82	81	83	02	26
	02											

#### 27.22.4.26.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.3.

# 27.22.4.26.3 LAUNCH BROWSER (UCS2 support)

27.22.4.26.3.1 Definition and applicability

See clause 3.2.2.

27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in:

• ISO/IEC 10646 [17].

#### 27.22.4.26.2.3 Test purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.3.4 Method of test

27.22.4.26.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

• the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

• another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

# 27.22.4.26.3.4.2 Procedure

## Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

Step	Direction	MESSAGE / Action	Comments
0	ME	The user is navigating in a Wap	[Browser is in use, the current session is not
1	$SIM \to ME$	session (not default URL) PROACTIVE COMMAND PENDING: LAUNCH BROWSER	secured]]
	NAT 01NA	3.1.1	
2	11.1E / O.111.	FETCH	r
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 3.1.1	browser", alpha id. In UCS2]
4	$ME \rightarrow USER$	ME displays the alpha identifier "ЗДРАВСТВУЙТЕ"	["Hello" in Russian]
5	$USER \to ME$	The user confirms the launch browser.	[user confirmation]
6	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1	[Command performed successfully]
7	ME→SS	The ME does not close the existing	
		session and attempts to connect the default URL.	
8	SIM  o ME	PROACTIVE SIM SESSION	
0	SIIVI → IVIE	ENDED	
9	$USER \ \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 3.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier

Data coding scheme: UCS2 (16 bits)
Text: "ЗДРАВСТВУЙТЕ"

Coding:

BER-TLV:	D0	26	81	03	01	15	02	82	02	81	82	31
	00	05	19	80	04	17	04	14	04	20	04	10
	04	12	04	21	04	22	04	12	04	23	04	19
	04	22	04	15								

## TERMINAL RESPONSE: LAUNCH BROWSER 3.1.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00

#### 27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 3.1.

## 27.22.4.26.4 LAUNCH BROWSER (icons support)

27.22.4.26.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clauses 6.4.26 and 6.6.26, clause 12.6, clause 12.7, clause 12.48, clause 13.2, clause 12.2, clause 12.47, optional clause 12.49, optional clause 12.50, clause 12.15 and clause 12.31.

#### 27.22.4.26.4.3 Test purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.4.4 Method of test

27.22.4.26.4.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

• the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway").

With that default gateway we shall be able to access to an URL different from the default one.

• another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

#### 27.22.4.26.4.4.2 Procedure

# Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
		4.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.1.1	browser", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier and the icon	["Not self explan."]
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$		[Command performed successfully]
		BROWSER 4.1.1 A	
7	ME→SS	The ME does not close the existing	
,	IVIE→33	session and attempts to connect	
		the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	0 / <u></u>	ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

#### PROACTIVE COMMAND: LAUNCH BROWSER 4.1.1

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME
URL empty

Alpha Identifier "Not self explan."

Icon identifier:

 $\begin{array}{ll} \mbox{Icon qualifier:} & \mbox{not self-explanatory} \\ \mbox{Icon identifier:} & \mbox{record 1 in EF}_{(IMG)} \\ \end{array}$ 

## Coding:

BER-TLV:	D0	21	81	03	01	15	02	82	02	81	82	31
	00	05	10	4E	6F	74	20	73	65	6C	66	20
	65	78	70	6C	61	6E	2E	1E	02	01	01	

#### TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 A

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

# Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
		4.1.1	
2	/	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
			browser", no null alpha id.]
4	$ME \rightarrow USER$	ME displays the alpha identifier Without the icon	["Not self explan."]
5	$USER \to ME$	1	[user confirmation]
		browser.	-
6	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully but
		BROWSER 4.1.1 B	requested icon could not be displayed]
7	$ME { ightarrow} SS$	The ME does not close the existing	
		session and attempts to connect	
_		the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
0	LIGED ME	ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

TERMINAL RESPONSE: LAUNCH BROWSER 4.1.1 B

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	04
DEIX IEV.	0.	00	0.	10	02	02	02	02	0.	00	0.	

# Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
		4.2.1	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.2.1	browser", alpha id. In UCS2]
4	$ME \to USER$	ME displays only the icon	["Self explan."]
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \to SIM$	TERMINAL RESPONSE: LAUNCH	[Command performed successfully]
		BROWSER 4.2.1 A	
7	ME→SS	The ME does not close the existing	
		session and attempts to connect	
		the default URL.	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
		ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation with the default URL.	
		with the delauit ORL.	

## PROACTIVE COMMAND: LAUNCH BROWSER 4.2.1

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: SIM
Destination device: ME
URL empty
Alpha Identifier "Self explan."

Icon identifier:

 $\begin{tabular}{ll} Icon qualifier: & self-explanatory \\ Icon identifier: & record 1 in EF_{(IMG)} \end{tabular}$ 

## Coding:

BER-TLV:	D0	1D	81	03	01	15	02	82	02	81	82	31
	00	05	0C	73	65	6C	66	20	65	78	70	6C
	61	6E	2E	1E	02	00	01					

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 A

Logically:

Command details

Command number:

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	00	l
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

# Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	[Browser is in use, the current session is not
		PENDING: LAUNCH BROWSER	secured]]
_		4.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND:	[connect to the default URL, "use the existing
		LAUNCH BROWSER 4.2.1	browser", alpha id. In UCS2]
4	$ME \rightarrow USER$	ME displays only the alpha identifier	["Self explan."]
5	$USER \to ME$	The user confirms the launch	[user confirmation]
		browser.	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B	[Command performed successfully]
			[Command performed successfully but
7	ME→SS	The ME does not close the existing	requested icon could not be displayed]
,	IVIE→SS	session and attempts to connect	
		the default URL	
8	$SIM \rightarrow ME$	PROACTIVE SIM SESSION	
	0 / <u></u>	ENDED	
9	$USER \to ME$	The user verifies that the default	
		URL is connected; and the	
		previous URL can be retrieved.	
		Then he/she ends the navigation	
		with the default URL.	

TERMINAL RESPONSE: LAUNCH BROWSER 4.2.1 B

Logically:

Command details

Command number: 1

Command type: LAUNCH BROWSER
Command qualifier: use the existing browser

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV:	81	03	01	15	02	82	02	82	81	83	01	04

#### 27.22.4.26.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 4.1A to 4.2B.

#### 27.22.4.27 OPEN CHANNEL

# 27.22.4.27.1 Open Channel (related to CSD)

## 27.22.4.27.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.27.1.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

#### 27.22.4.27.1.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (OK); or
- TERMINAL RESPONSE (Command performed with modification); or
- TERMINAL RESPONSE (Network currently unable to process command);

to the SIM after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

## 27.22.4.27.1.4 Method of test

## 27.22.4.27.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.4.27.1.4.2 Procedure

#### Expected Sequence 1.1 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.1.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL (immediate) 1.1.1	

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent Buffer size 1400 bytes

Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	05	78				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: CSD

Bearer parameter

447

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent Buffer size 1400 bytes

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	00	B5	04	01	07	00	01	B9	02
	05	78										

## Expected Sequence 1.2 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.34)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.2.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.2.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6			[Command performed successfully]
		CHANNEL (immediate) 1.2.1	

# PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.34

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent Buffer size 1400 bytes

Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	0C	00	01	B9	02	05	78				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.34

Bearer service: data circuit asynchronous

Connection element: non-transparent Buffer size 1400 bytes

Coding:

BER-TLV:

81	03	01	40	01	82	02	82	81	83	01	00
B8	02	81	00	B5	04	01	0C	00	01	B9	02
05	78										

## Expected Sequence 1.3 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.120)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.3.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.3.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL (immediate) 1.3.1	

## PROACTIVE COMMAND: OPEN CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	27	00	01	B9	02	05	78				

TERMINAL RESPONSE: OPEN CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.120

Bearer service: data circuit asynchronous Connection element: non-transparent

Buffer size 1400 bytes

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00	l
	B8	02	81	00	B5	04	01	27	00	01	B9	02	l
	05	78											l

# Expected Sequence 1.4 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.110 or X.31 flag stuffing, bearer asynchronous UDI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.4.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.4.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \to ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL (immediate) 1.4.1	- · · · · · · · · · · · · · · · · · · ·

PROACTIVE COMMAND: OPEN CHANNEL 1.4.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.110 or X.31 flag stuffing Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

#### Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	47	00	01	B9	02	05	78				_

#### TERMINAL RESPONSE: OPEN CHANNEL 1.4.1

# Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

**Bearer Description** 

Bearer Parameter

Data rate: 9600bps V.110 or X.31 flag stuffing Bearer Service: data circuit asynchronous UDI

Connection Element:non-transparent Buffer size 1400 bytes

## Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	00	B5	04	01	47	00	01	B9	02
	05	78										

# Expected Sequence 1.5 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous RDI)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.5.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.5.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6		TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL (immediate) 1.5.1	

PROACTIVE COMMAND: OPEN CHANNEL 1.5.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous RDI

Connection element: non-transparent

Buffer size 1400 bytes

### Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	04	01	B9	02	05	78				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.5.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

**Bearer Description** 

Bearer Parameter

Data rate: 9600bps V.32

Bearer Service: data circuit asynchronous RDI

Connection Element: non-transparent

Buffer size 1400 bytes

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	00	B5	04	01	07	04	01	B9	02
	05	78										

# Expected Sequence 1.6 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.6.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.6.1	
4	$ME \to SS$	SETUP CALL	
5	$SS \to ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL (immediate) 1.6.1	

PROACTIVE COMMAND: OPEN CHANNEL 1.6.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous Connection element: both, transparent preferred

Buffer size 1400 bytes

Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	02	B9	02	05	78				

TERMINAL RESPONSE: OPEN CHANNEL 1.6.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer Description

Bearer Parameter

Data rate: 9600bps V.32

Bearer Service: data circuit asynchronous

Connection Element: both, transparent preferred

Buffer size 1400 bytes

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
_	B8	02	81	00	B5	04	01	07	00	02	B9	02
	05	78										

# Expected Sequence 1.7(OPEN CHANNEL, immediate link establishment, CSD, 9600 bps, performed with modification)

The system simulator shall be configured such that open channel requests will be accepted with modification

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.7.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.7.1	
4	$ME \rightarrow SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed with modification]
		CHANNEL (immediate) 1.7.1	

#### PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 64000bps X.31

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	54	00	01	B9	02	05	78				

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed with modification

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous Connection element: non-transparent

Buffer size 1400 bytes

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	B8	02	81	00	B5	04	01	07	00	01	B9	02
	05	78										

# Expected Sequence 1.8 (OPEN CHANNEL, immediate link establishment, CSD, Network currently unable to process command)

The system simulator shall be configured such that open channel requests will be rejected with "No specific cause can be given".

S	Step	Direction	MESSAGE / Action	Comments
	1	$SIM \to ME$	PROACTIVE COMMAND	
			PENDING: OPEN CHANNEL 1.8.1	
	2	$ME \to SIM$	FETCH	
	3	$SIM \to ME$	PROACTIVE COMMAND: OPEN	
			CHANNEL (immediate) 1.8.1	
	4	$ME \to SIM$	TERMINAL RESPONSE: OPEN	[Network currently unable to process
			CHANNEL (immediate) 1.8.1	command]

#### PROACTIVE COMMAND: OPEN CHANNEL 1.8.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 64000bps X.31

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	54	00	01	B9	02	05	78				

TERMINAL RESPONSE: OPEN CHANNEL 1.8.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Network currently unable to process command

Additional info: No specific cause can be given

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 64000bps X.31

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent Buffer size 1400 bytes

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	21
	00	B5	04	01	54	00	01	B9	02	05	78	

## Expected Sequence 1.9 (OPEN CHANNEL, immediate link establishment, CSD, No channel available)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.9.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.9.1	
4		SETUP CALL	
5	$SS \to ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully ]
		CHANNEL (immediate) 1.9.1	
7	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.9.2	
8	$ME \rightarrow SIM$	I -	
9	$SIM \to ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.9.2	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Bearer independent protocol error]
		CHANNEL (immediate) 1.9.2	

PROACTIVE COMMAND: OPEN CHANNEL 1.9.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

#### Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	33	00	01	B9	02	05	78				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.9.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous

Connection element: non-transparent Buffer size 1400 bytes

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	00	B5	04	01	33	00	01	B9	02
	05	78										

## PROACTIVE COMMAND: OPEN CHANNEL 1.9.2

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

#### Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	33	00	01	B9	02	05	78				

### TERMINAL RESPONSE: OPEN CHANNEL 1.9.2

## Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional info: No channel available

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	3A
	01	B5	04	01	33	00	01	B9	02	05	78	

## Expected Sequence 1.10 (OPEN CHANNEL, ME is busy on another call related to CSD)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP CALL 1.10.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		CALL 1.10.1	
4	$ME \rightarrow USER$	ME displays "Not busy" and	
		prompts the user to set up a call to	
		"+012340123456p1p2"	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	ME→SS	The ME attempts to set up a call to	
		"+012340123456p1p2"	
7	$SS \to ME$	The ME receives the CONNECT	
		message from the system	
		simulator.	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Command performed successfully]
		CALL 1.10.1	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.1.1	
10	$ME \rightarrow SIM$	FETCH	
11	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL (immediate) 1.1.1	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[ME currently unable to process command]
		CHANNEL (immediate) 1.10.1	

#### PROACTIVE COMMAND: SET UP CALL 1.10.1

## Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Not busy"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

# Coding:

BER-TLV:	D0	1E	81	03	01	10	00	82	02	81	83	85
	80	4E	6F	74	20	62	75	73	79	86	09	91
	10	32	04	21	43	65	1C	2C				

### TERMINAL RESPONSE: SET UP CALL 1.10.1

#### Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00

TERMINAL RESPONSE: OPEN CHANNEL 1.10.1

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: ME currently unable to process command

Additional info: ME currently busy on call

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1400 bytes

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	20
	02	B5	04	01	07	00	01	B9	02	05	78	

27.22.4.27.2 Open Channel (related to GPRS)

27.22.4.27.2.2 Definition and applicability

See clause 3.2.2.

27.22.4.27.2.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

27.22.4.27.2.3 Test purpose

27.22.4.27.2.4 Method of test

27.22.4.27.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs
User login: UserLog
User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### 27.22.4.27.2.4.2 Procedure

# Expected Sequence 2.1 (OPEN CHANNEL, immediate link establishment, GPRS, no local address, no alpha identifier, no network access name)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING	
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.1.1	
4	$ME \rightarrow user$	The ME may display channel opening information	
5	$ME \rightarrow SS$	SETUP CALL	
6	$SS \to ME$	CONNECTED	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.1.1	[Command performed successfully]

#### PROACTIVE COMMAND: OPEN CHANNEL 2.1.1

### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02

Delay Class: 04 Reliability Class: 05 Peak throughput class: 05 Mean throughput class: 16 Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	05	78
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.1.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	05	78							

# Expected Sequence 2.2 (OPEN CHANNEL, immediate link establishment GPRS, no alpha identifier, with network access name)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.2.1	
4	$\text{ME} \to \text{user}$	The ME may display channel opening information	
5	$ME \rightarrow SS$	SETUP CALL	
6	$SS \to ME$	CONNECTED	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.2.1	[Command performed successfully]

#### PROACTIVE COMMAND: OPEN CHANNEL 2.2.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: .TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

## Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	05	78
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	80
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.2.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description:

Bearer Type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size 1400

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	05	78							

## Expected Sequence 2.3 (OPEN CHANNEL, immediate link establishment, GPRS, with alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.3.1	
4	$ME \rightarrow user$	Confirmation phase with alpha ID	"Open ID"
5	$user \to ME$	The user confirms	
6	$ME \rightarrow SS$	SETUP CALL	
7	$SS \rightarrow ME$	CONNECTED	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.1.1	[Command performed successfully]

#### PROACTIVE COMMAND: OPEN CHANNEL 2.3.1

### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME
Alpha Identifier Open ID

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: .TestGp.rs

UserLog (User login) Text String: UserPwd (User password) Text String:

SIM/ME interface transport level Transport format: UDP Port number: 44444 01.01.01.01 Data destination address

BER-TLV:	D0	4B	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	02
	04	05	05	10	02	39	02	05	78	47	0A	06
	54	65	73	74	47	70	02	72	73	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05
	21	01	01	01	01							

# Expected Sequence 2.4 (OPEN CHANNEL, immediate link establishment, GPRS, with null alpha identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \to SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.4.1	
4	$ME \rightarrow user$	Confirmation phase	[The ME should not give any information]
5	$user \to ME$	The user confirms	[Only if the ME asks for user confirmation]
6	$ME \rightarrow SS$	SETUP CALL	
7	$SS \rightarrow ME$	CONNECTED	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.1.1	[Command performed successfully]

#### PROACTIVE COMMAND: OPEN CHANNEL 2.4.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Alpha Identifier Null

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400 Network access name: . TestGp.rs

Other Address

Length: 00

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	46	81	03	01	40	01	82	02	81	82	05
	00	35	07	02	02	04	05	05	10	02	39	02
	05	78	47	0A	06	54	65	73	74	47	70	02
	6F	67	3E	00	0D	08	F4	55	73	65	72	4C
	6F	67	0D	08	F4	55	73	65	72	50	77	64
	3C	03	01	AD	9C	3E	05	21	01	01	01	01

# Expected Sequence 2.5 (OPEN CHANNEL, immediate link establishment, GPRS, command performed with modifications (buffer size) )

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \to SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND : OPEN CHANNEL 2.5.1	
4	$ME \rightarrow user$	The ME may display channel opening information	
5	$ME \to SS$	SETUP CALL	
6	$SS \to ME$	CONNECTED	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN CHANNEL 2.5.1	[Command performed with modification]

#### PROACTIVE COMMAND: OPEN CHANNEL 2.5.1

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 2000 Network access name: .TestGp.rs

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### Coding:

BER-TLV:	D0	42	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	07	D0
	47	0A	06	54	65	73	74	47	70	02	72	73
	0D	08	F4	55	73	65	72	4C	6F	67	0D	80
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3F	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 2.5.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed with modifications (07)

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	07
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	05	78							

#### **Expected Sequence 2.6 Void**

Expected Sequence 2.7 (OPEN CHANNEL, immediate link establishment, GPRS, open command with alpha identifier, User did not accept the proactive command)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.7.1	
4	$\text{ME} \to \text{user}$	Confirmation phase with alpha ID	[The ME shall display "Open ID"]
5	$user \to ME$	The user rejects	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[User did not accept the proactive command]
		CHANNEL 2.7.1	

#### PROACTIVE COMMAND: OPEN CHANNEL 2.7.1

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME
Alpha Identifier "Open ID"

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

Coding:

BER-TLV:	D0	3F	81	03	01	40	01	82	02	81	82	05
	07	4F	70	65	6E	20	49	44	35	07	02	02
	04	05	05	10	02	39	02	05	78	0D	08	F4
	55	73	65	72	4C	6F	67	0D	08	F4	55	73
	65	72	50	77	64	3C	03	01	AD	9C	3E	05
	21	01	01	01	01							

TERMINAL RESPONSE: OPEN CHANNEL 2.7.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: User did not accept the proactive command

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	22	
	35	07	02	02	04	05	05	10	02	39	02	05	
	78												

# Expected Sequence 2.8 (OPEN CHANNEL, immediate link establishment, GPRS, ME busy on call)

Step	Direction	MESSAGE / Action	Comments
1	User $\rightarrow$	Set up a call	
	ME		
2	$ME \rightarrow SS$	SETUP CALL	
3	$SS \to ME$	CONNECTED	
4	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING	
5	$ME \rightarrow SIM$	FETCH	
6	$SIM \to ME$	PROACTIVE COMMAND : OPEN	
		CHANNEL 2.8.1	
7	$ME \rightarrow SIM$	TERMINAL RESPONSE : OPEN	[ME busy on call]
		CHANNEL 2.8.1	

## PROACTIVE COMMAND: OPEN CHANNEL 2.8.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

## Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
-	07	02	02	04	05	05	10	02	39	02	05	78
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

#### TERMINAL RESPONSE: OPEN CHANNEL 2.8.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: ME currently unable to process command

Additional info: ME busy on call

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1400

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	02	20
·	02	35	07	02	02	04	05	05	10	02	39	02
	05	78										

#### 27.22.4.27.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.10 and 2.1 to 2.8.

#### 27.22.4.28 CLOSE CHANNEL

## 27.22.4.28.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.28.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

#### 27.22.4.28.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

#### 27.22.4.28.4 Method of Test

#### 27.22.4.28.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### 27.22.4.28.4.2 Procedure

# **Expected sequence 1.1 (CLOSE CHANNEL, successful)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL 1.1.1	
		A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		1.1.1B	
2	$ME \rightarrow SIM$	_	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1A or PROACTIVE COMMAND:	
		OPEN CHANNEL 1.1.1B	
4	$ME \rightarrow SS$	SETUP CALL	
5		CONNECTED	
6		TERMINAL RESPONSE: OPEN	[Command performed successfully]
	IVIL -> SIIVI	CHANNEL 1.1.1A	[Continuation performed successfully]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: CLOSE CHANNEL	
		1.1.1	
8	$ME \rightarrow SIM$	FETCH	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: CLOSE	
		CHANNEL 1.1.1	
10		DISCONNECT	[MO DISCONNECT]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE	[Command performed successfully]
		CHANNEL 1.1.1	

## PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1000

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	03	E8				

# TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	03	E8										

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B

## Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

## Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	03	E8
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	03	E8							

PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

	,			0			-	-	20		
BFR-TI V·	130	09	81	0.3	Λ1	//1	00	82	1 02	L 21	21

TERMINAL RESPONSE: CLOSE CHANNEL 1.1.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	01	00
	0.	00			00	02	02	02	U .	00	01	- 00

## Expected sequence 1.2 (CLOSE CHANNEL, with an invalid channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL	
		1.1.1A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
2	NAT CINA	1.1.1B	
2	$ME \rightarrow SIM$	PROACTIVE COMMAND: OPEN	
3	SIIVI → IVIE	CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
		1.1.1B	
4	$ME \to SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6		TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
_	0114 145	CHANNEL 1.1.1B	
7	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL	
		11.2.1	
8	$ME \rightarrow SIM$		
9		PROACTIVE COMMAND: CLOSE	
	J.IVI / IVIL	CHANNEL 1.2.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE	[Invalid channel number]
		CHANNEL 1.2.1	-

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 2

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	22

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Bearer Independent Protocol error Additional Result: Channel identifier not valid

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
	03											

# Expected sequence 1.3 (CLOSE CHANNEL, on an already closed channel)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING:	See initial conditions
		OPEN CHANNEL 1.1.1A or	
		PROACTIVE COMMAND PENDING:	
	ME CIM	OPEN CHANNEL 1.1.1B	
2	$ME \rightarrow SIM$	PROACTIVE COMMAND: OPEN	
3	SIIVI → IVIE	CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL 1.1.1B	
4	$ME \rightarrow SS$	SETUP CALL	
5		CONNECTED	
6		TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN	
7	OIM ME	CHANNEL 1.1.1B	
'	SIM → ME	PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1	
8	$ME \rightarrow SIM$		
9		PROACTIVE COMMAND: CLOSE	
	O 7	CHANNEL 1.1.1	
10	$\text{ME} \rightarrow \text{SS}$	DISCONNECT	[MO DISCONNECT]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE CLOSE	[Command performed successfully]
		CHANNEL 1.1.1	
12	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
40		CLOSE CHANNEL 1.3.1	
13	$ME \rightarrow SIM$		
14	2IM → ME	PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1	
15	ME -> SIM	TERMINAL RESPONSE CLOSE	[Channel closed]
13	IVIE -> SIIVI	CHANNEL 1.3.1	
L	<u> </u>	OTHER LOCAL	l

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details

Command number:

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Coding:

BER-TLV:	D0	09	81	03	01	41	00	82	02	81	21

#### TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: CLOSE CHANNEL

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional Result: Channel closed

Coding:

BER-TLV:	81	03	01	41	00	82	02	82	81	83	02	3A
'	02											

#### 27.22.4.28.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

#### 27.22.4.29 RECEIVE DATA

## 27.22.4.29.1 Definition and applicability

See clause 3.2.2.

#### 27.22.4.29.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

#### 27.22.4.29.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

#### 27.22.4.29.4 Method of test

#### 27.22.4.29.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

# SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### 27.22.4.29.4.2 Procedure

# Expected sequence 1.1 (RECEIVE DATA, already opened channel)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP EVENT LIST	
		1.1.1 PENDING	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT LIST	
		1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST	
5	$SIM \rightarrow ME$	1 *****	See initial conditions
3	SIIVI - IVIL	CHANNEL 1.1.1A or PROACTIVE COMMAND	oce initial conditions
		PENDING: OPEN CHANNEL 1.1.1B	
6	$ME \rightarrow SIM$		
7		PROACTIVE COMMAND: OPEN CHANNEL	
		(immediate) 1.1.1A or PROACTIVE COMMAND:	
		OPEN CHANNEL 1.1.1B	
8		SETUP CALL	
9		CONNECTED	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN CHANNEL	[Command performed successfully]
		1.1.1A	
		or TERMINAL RESPONSE: OPEN CHANNEL	
		1.1.1B	
11	$SS \rightarrow ME$	Transfer of 1000 Bytes of data to the ME through	
	00 / 1112	channel 1	
12	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD - Data	(1000 Bytes of data in the ME buffer)
		available 1.1.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: RECEIVE	
		DATA 1.1.1	
14	$ME \rightarrow SIM$		000 B /
15		PROACTIVE COMMAND: RECEIVE DATA 1.1.1	200 Bytes
16		TERMINAL RESPONSE: RECEIVE DATA 1.1.1	
17	SIM → ME	PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2	
18	$ME \rightarrow SIM$		
19		PROACTIVE COMMAND: RECEIVE DATA 1.1.2	200 Bytes
20		TERMINAL RESPONSE: RECEIVE DATA 1.1.2	200 Bytes
21		PROACTIVE COMMAND PENDING: RECEIVE	
	0	DATA 1.1.3	
22	$ME \rightarrow SIM$	FETCH	
23	$SIM \to ME$	PROACTIVE COMMAND: RECEIVE DATA 1.1.3	200 Bytes
24		TERMINAL RESPONSE: RECEIVE DATA 1.1.3	
25	$SIM \to ME$	PROACTIVE COMMAND PENDING: RECEIVE	
		DATA 1.1.4	
26	$ME \rightarrow SIM$	FETCH	000 B /
27		PROACTIVE COMMAND: RECEIVE DATA 1.1.4	200 Bytes
28	$ME \rightarrow SIM$		
29	$SIM \rightarrow ME$		
30	$ME \rightarrow SIM$	DATA 1.1.5 FETCH	
31			200 Bytes
32	$ME \rightarrow SIM$		200 Dytes
J2	IVIE -> SIIVI	TERMINAL REGIONOL. RECEIVE DATA 1.1.3	

# PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

# Logically:

Command details

Command number: 1
Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device:

SIM

Destination device: ME

Event list Data available

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	09										

## TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00
----------	----	----	----	----	----	----	----	----	----	----	----	----

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1000

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	03	E8				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
·	B8	02	81	01	B5	04	01	07	00	01	B9	02
	03	E8										

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class:
Mean throughput class:

Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	03	E8
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	03	E8							_

#### ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME
Destination device: SIM

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: FF (more than 255 bytes are available)

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	FF								

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

Command details

Command number:

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	01	42	00	82	02	81	21	B7
•	01	C8										

## PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	02	42	00	82	02	81	21	B7
·	01	C8										

# PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

Coding:

BER-TLV:	D0	0C	81	03	03	42	00	82	02	81	21	B7
'	01	C8										

PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

Command details

Command number:

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

#### Coding:

BER-TLV:	D0	0C	81	03	04	42	00	82	02	81	21	B7
	01	C8										

#### PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data Length

Channel Data Length: 200

## Coding:

BER-TLV:	D0	0C	81	03	05	42	00	82	02	81	21	B7
	01	C8										

#### **TERMINAL RESPONSE: RECEIVE DATA 1.1.1**

Logically:

Command details

Command number:

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Channel Data : 00 01 02 .. C7 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	00	01	02		C7	B7	01	FF	

TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:

Command details

Command number: 2

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel Data : C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	02	42	00	82	02	82	81	83	01	00
-	B6	81	C8	C8	C9	CA		FF	00	01	02	
	8F	B7	01	FF								

#### TERMINAL RESPONSE: RECEIVE DATA 1.1.3

#### Logically:

Command details

Command number: 3

Command type: RECEIVE DATA

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel Data : 90 91 .. FF 00 01 – 57 (200 Bytes of data)

Channel data length: FF

Coding:

BER-TLV:	81	03	03	42	00	82	02	82	81	83	01	00
	B6	81	C8	91	91	92		FF	00	01	02	
	57	B7	01	FF								

#### TERMINAL RESPONSE: RECEIVE DATA 1.1.4

# Logically:

Command details

Command number: 4

Command type: RECEIVE DATA
Command qualifier: RFUDevice identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

Channel data length: C8

BER-TLV:	81	03	04	42	00	82	02	82	81	83	01	00
	B6	81	C8	58	59	5A		FF	00	01	02	
	1F	B7	01	C8								

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

Command details

Command number: 5

Command type: RECEIVE DATA
Command qualifier: RFUDevice identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Channel Data: 20 21 .. E7 (200 Bytes of data)

Channel data length: 00

#### Coding:

BER-TLV:	81	03	01	42	00	82	02	82	81	83	01	00
	B6	81	C8	20	21	22		E7	B7	01	00	

## 27.22.4.29.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

#### 27.22.4.30 SEND DATA

## 27.22.4.30.1 Definition and applicability

See clause 3.2.2.

## 27.22.4.30.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

#### 27.22.4.30.3 Test purpose

To verify that the ME shall send a:

- TERMINAL RESPONSE (Command Performed Successfully); or
- TERMINAL RESPONSE (ME currently unable to process command); or
- TERMINAL RESPONSE (Bearer Independent Protocol Error);

to the SIM after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

## 27.22.4.30.4 Method of test

# 27.22.4.30.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

27.22.4.30.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL 1.1.1	See initial conditions
		A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		1.1.1B	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
4	ME . CC	1.1.1B	
		SETUP CALL	
5		CONNECTED	[O
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
7	SIM VME	PROACTIVE COMMAND	
'		PENDING: SEND DATA 1.1.1	
8	$ME \rightarrow SIM$		
9		PROACTIVE COMMAND: SEND	
	, <b>.</b>	DATA (immediate) 1.1.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
		DATA (immediate) 1.1.1	

# PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A

#### Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1000

#### Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	03	E8				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	03	E8										

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B

#### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	03	E8
	0D	08	F4	55	73	65	72	4C	6F	67	0D	80
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

#### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	03	E8							

# PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	21	B6
·	08	00	01	02	03	04	05	06	07			

#### TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: 8 Bytes

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	80									

# **Expected sequence 1.2 (SEND DATA, Store mode)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		OPEN CHANNEL 1.1.1A or	See initial conditions
		PROACTIVE COMMAND PENDING:	
_		OPEN CHANNEL 1.1.1B	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1A or PROACTIVE	
1	ME CO	COMMAND: OPEN CHANNEL 1.1.1B SETUP CALL	
4 5		ICONNECTED	
6			[Command performed augeograficht]
0	ME → SIM	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SEND DATA 1.2.1	
8	$ME \rightarrow SIM$		
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	Send 500 Bytes of data (200 + 200 + 100)
		DATA (store mode) 1.2.1	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
11	CIM . ME	DATA (store mode) 1.2.1	
11	SIM - ME	PROACTIVE COMMAND PENDING: SEND DATA 1.2.2	
12	$ME \rightarrow SIM$	=	
13		PROACTIVE COMMAND: SEND	
	OIIVI 7 IVIL	DATA (store mode) 1.2.2	
14	$ME \rightarrow SIM$	,	[Command performed successfully]
		DATA (store mode) 1.2.2	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SEND DATA 1.2.3	
16	$ME \rightarrow SIM$		
17	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
40		DATA (Immediate mode) 1.2.3	
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Command performed successfully]
<u> </u>		DATA (Immediate mode) 1.2.3	

## PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 00 01 .. C7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01		C7					

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
·	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data : C8 C9 .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
_	B6	81	C8	C8	C9		FF	00	01		8F	

TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

## Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.2.3

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. F3 (100 Bytes of data)

Coding:

BER-TLV:	D0	6F	81	03	01	43	01	82	02	81	21	B6
	64	90	91		F3							

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Immediate mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	R7	01	FF									

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN	See initial conditions
		CHANNEL 1.1.1 A or	
		PROACTIVE COMMAND PENDING: OPEN	
		CHANNEL 1.1.1B	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: OPEN CHANNEL	
		1.1.1 A or PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1B	
4	$ME \rightarrow SS$	SETUP CALL	
5	$SS \to ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN CHANNEL	[Command performed successfully]
		1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN CHANNEL	
_	0114 145	1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
8	$ME \rightarrow SIM$	DATA 1.3.1	
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store	Send 1kByte of data by packet of 200 Bytes
9	SIIVI → IVIE	mode) 1.3.1	Send Trayte of data by packet of 200 Bytes
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store	[Command performed successfully]
	1012 / 01101	mode) 1.3.1	[Command portormed edecectrumy]
11	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		DATA 1.3.2	
12	$ME \rightarrow SIM$	FETCH	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store	[200 Bytes]
		mode) 1.3.2	
14	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store	[Command performed successfully]
4-		mode) 1.3.2	
15	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
16	NAT OINA	DATA 1.3.3	
16 17		FETCH PROACTIVE COMMAND: SEND DATA (store	[200 Putos]
17	$SIM \rightarrow ME$	mode) 1.3.3	[200 Bytes]
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store	[Command performed successfully]
'	IVIL -7 SIIVI	mode) 1.3.3	[25and portormed successfully]
19	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		DATA 1.3.4	
20	$ME \rightarrow SIM$	FETCH	
21	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store	[200 Bytes]
		mode) 1.3.4	
22	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store	[Command performed successfully]
		mode) 1.3.4	
23	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
		DATA 1.3.5	
24	$ME \rightarrow SIM$	FETCH	1000 B 1
25	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA	[200 Bytes]
26	ME CINA	(immediate) 1.3.5	[Command performed cusposefully]
26	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
<u> </u>	l	(immediate) 1.3.5	

# PROACTIVE COMMAND: SEND DATA 1.3.1

# Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data : 00 01 02 .. C7 (200 Bytes of data)

#### Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	00	01	02		C7				

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
·	B7	01	FF									

PROACTIVE COMMAND: SEND DATA 1.3.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: C8 C9 CA .. FF 00 01 .. 8F (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	C8	C9	CA		FF	00	02		8F

TERMINAL RESPONSE: SEND DATA 1.3.2

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

BER-TLV:	81	03	01	43	00	82	02	21	82	83	01	00
	B7	01	FF									

## PROACTIVE COMMAND: SEND DATA 1.3.3

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 90 91 .. FF 00 01 .. 57 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
	B6	81	C8	90	91		FF	00	01		57	

#### TERMINAL RESPONSE: SEND DATA 1.3.3

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: More than 255 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	FF									

#### PROACTIVE COMMAND: SEND DATA 1.3.4

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 58 59 .. FF 00 01 .. 1F (200 Bytes of data)

BER-TLV:	D0	81	D4	81	03	01	43	00	82	02	81	21
·	B6	81	C8	58	59		FF	00	01		1F	

TERMINAL RESPONSE: SEND DATA 1.3.4

Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Store mode

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: 200 bytes of space available in the Tx buffer

Coding:

BER-TLV:	81	03	01	43	00	82	02	82	81	83	01	00
	B7	01	C8									

PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1

Channel Data

Channel Data: 20 21 .. E7 (200 Bytes of data)

Coding:

BER-TLV:	D0	81	D4	81	03	01	43	01	82	02	81	21
	B6	81	C8	20	21		E7					

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully Channel data length: No space available in the Tx buffer

BER-TLV:	81	03	01	43	01	82	02	82	81	83	01	00
	B7	01	00									

Expected sequence 1.4 (SEND DATA, 2 consecutive SEND DATA Store mode)

01	Dinastian	MECCACE / Action	0
Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1A or	See initial conditions
		PROACTIVE COMMAND PENDING: OPEN	
		CHANNEL 1.1.1B	
2	$ME \rightarrow SIM$	FETCH	
3		PROACTIVE COMMAND: OPEN	
		CHANNEL1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL 1.1.1B	
4	$ME \rightarrow SS$	SETUP CALL	
5	$SS \rightarrow ME$	CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE: OPEN CHANNEL	
		1.1.1B	
7	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
		DATA 1.3.1	
8	$ME \rightarrow SIM$		0 d 4000 Potes of data have a shate of 000
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.1	Send 1000 Bytes of data by packets of 200 Bytes
		(Store mode) 1.3.1	Dytes
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(store mode) 1.3.1	
11	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
40	145 0114	DATA 1.3.2	
12 13	$ME \rightarrow SIM$	PROACTIVE COMMAND: SEND DATA	[200 Putpe]
13	$SIM \rightarrow ME$	(store mode) 1.3.2	[200 Bytes]
14	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
	/	(store mode) 1.3.2	, , , , , , , , , , , , , , , , , , , ,
15	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
40		DATA 1.3.3	
16 17		FETCH   PROACTIVE COMMAND: SEND DATA	[200 Pytos]
17	$SIM \rightarrow ME$	(store mode) 1.3.3	[200 Bytes]
18	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(store mode) 1.3.3	
19	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
20	145 0114	DATA 1.3.4	
20 21		FETCH	[200 Pytos]
21	SIIVI → IVIE	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
22	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(store mode) 1.3.4	
23	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
24	CINA NAT	DATA 1.3.5	
24	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (immediate) 1.3.5	
24	$ME \rightarrow SIM$	FETCH	
26		TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(immediate) 1.3.5	· "
27	$SIM \to ME$	PROACTIVE COMMAND PENDING: SEND	
00	145 0114	DATA 1.3.1	
28 29	$ME \rightarrow SIM$	FETCH PROACTIVE COMMAND: SEND DATA	Send 1000 Bytes of data by packets of 200
29	$SIM \rightarrow ME$	(store mode) 1.3.1	Bytes
		(	
30	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(store mode) 1.3.1	
31	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND	
32	ME CIM	DATA 1.3.2 FETCH	
32	$ME \rightarrow SIM$ $SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA	[200 Bytes]
	OIIVI - IVIE	(store mode) 1.3.2	[200 29:00]
34	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA	[Command performed successfully]
		(store mode) 1.3.2	

35	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.3	
36	$ME \rightarrow SIM$	FETCH	
37	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.3	[200 Bytes]
38	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.3	[Command performed successfully]
39	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SEND DATA 1.3.4	
40	$ME \rightarrow SIM$	FETCH	
41	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND DATA (store mode) 1.3.4	[200 Bytes]
42	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (store mode) 1.3.4	[Command performed successfully]
43	$SIM \rightarrow ME$	PROACTIVÉ COMMAND PENDING: SEND DATA 1.3.5	
44	$ME \rightarrow SIM$	FETCH	
45	$SIM \to ME$	PROACTIVE COMMAND: SEND DATA	
		(immediate) 1.3.5	
46	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND DATA (immediate) 1.3.5	[Command performed successfully]

# Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL	
		1.1.1A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		1.1.1B	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
4	ME . CC	SETUP CALL	
	···· <b>=</b>		
5		CONNECTED	
6	ME → SIM	TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
7	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SEND DATA 1.5.1	
8	$ME \rightarrow SIM$		
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: SEND	
		DATA (immediate) 1.5.1	
10	$ME \rightarrow SIM$		[Invalid channel number]
		DATA (immediate) 1.1.1	

# PROACTIVE COMMAND: SEND DATA 1.5.1

## Logically:

Command details

Command number:

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 2

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	13	81	03	01	43	01	82	02	81	22	B6
	80	00	01	02	03	04	05	06	07			

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME Destination device: SIM

Result

General Result: Bearer Independent Protocol error (3A)

Additional Result: Channel identifier not valid (03)

Coding:

BER-TLV:	81	03	01	43	01	82	02	82	81	83	02	3A
·	03											

Expected sequence 1.6 (SEND DATA, immediate mode, Proactive SIM session terminated by the user)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL	
		1.1.1A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
2	$ME \rightarrow SIM$	–	
3		PROACTIVE COMMAND: OPEN	
3	SIIVI → IVIL	CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
		1.1.1B	
4	$ME \to SS$	SETUP CALL	
5		CONNECTED	
6	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A	
		or	
		TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B	
7	CIM ME	PROACTIVE COMMAND	
'	SIIVI → IVIL	PENDING; SEND DATA 1.6.1	
8	$ME \rightarrow SIM$		
9		PROACTIVE COMMAND: SEND	
		DATA (immediate) 1.6.1	
10	ME  o	ME displays "Send data"	
	USER		
11	USER →	Abort proactive session	
40	ME	TERMINAL RESPONSE SELE	[FD
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: SEND	[Proactive SIM session terminated by the
1		DATA (immediate) 1.1.1	user]

## PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: SIM
Destination device: Channel 1
Alpha Identifier: Send data

Channel Data

Channel Data: 00 01 .. 07 (8 Bytes of data)

Coding:

BER-TLV:	D0	1E	81	03	01	43	01	82	02	81	21	85
	09	53	65	6E	64	20	64	61	74	61	B6	80
	00	01	02	03	04	05	06	07				

# TERMINAL RESPONSE: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA
Command qualifier: Send Immediately

Device identities

Source device: ME Destination device: SIM Result

General Result: Proactive SIM session terminated by the user

Coding:

BER-TLV	: 81	03	01	43	01	82	02	82	81	83	01	10	1
---------	------	----	----	----	----	----	----	----	----	----	----	----	---

#### 27.22.4.30.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.6.

#### 27.22.4.31 GET CHANNEL STATUS

#### 27.22.4.31.1 Definition and applicability

See clause 3.2.2.

# 27.22.4.31.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

#### 27.22.4.31.3 Test purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the SIM after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

#### 27.22.4.31.4 Method of test

#### 27.22.4.31.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

## 27.22.4.31.4.2 Procedure

## Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET CHANNEL	
		STATUS 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	
		STATUS 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL GET STATUS 1.1.1	[Command performed successfully]

### PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82
----------	----	----	----	----	----	----	----	----	----	----	----

### TERMINAL RESPONSE: GET STATUS 1.1.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: No Channel, link not established

BER-TLV:
----------

B8	02	00	00				

# Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	See initial conditions
		PENDING: OPEN CHANNEL	
		1.1.1A or	
		PROACTIVE COMMAND	
		PENDING: OPEN CHANNEL	
		1.1.1B	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	
		CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
4	$ME \rightarrow SS$	SETUP CALL	
5		CONNECTED	
6		TERMINAL RESPONSE: OPEN	[Command performed successfully]
	IVIE -> SIIVI	CHANNEL 1.1.1A	[Confinant penomied successibility]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING: GET CHANNEL	
		STATUS 1.2.1	
8	$ME \rightarrow SIM$		
9	$SIM \rightarrow ME$	PROACTIVE COMMAND: GET	
		STATUS 1.2.1	
10	$ME \rightarrow SIM$	TERMINAL GET STATUS 1.2.1	[Command performed successfully]

## PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1000

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	03	E8				

### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 1000

### Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	B8	02	81	01	B5	04	01	07	00	01	B9	02
	03	E8										

### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B

### Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	03	E8
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number:

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	03	E8							

PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details

Command number:

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	44	00	82	02	81	82

**TERMINAL RESPONSE: GET STATUS 1.2.1** 

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	81	00								

## Expected sequence 1.3 (GET STATUS, after a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: SET UP	
		EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP EVENT LIST	
		1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Command performed successfully]
5	$SIM \to ME$	PROACTIVE COMMAND PENDING: OPEN	See initial conditions
		CHANNEL 1.1.1A or	
		PROACTIVE COMMAND PENDING: OPEN	
		CHANNEL 1.1.1B	
6	$ME \rightarrow SIM$	FETCH	
7	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN CHANNEL	
		1.1.1A or PROACTIVE COMMAND: OPEN ICHANNEL 1.1.1B	
8	$ME \rightarrow SS$	SETUP CALL	
9	SS → ME	CONNECTED	
10		TERMINAL RESPONSE: OPEN CHANNEL	[Command performed successfully]
		1.1.1A	, , , , , , , , , , , , , , , , , , , ,
		or	
		TERMINAL RESPONSE: OPEN CHANNEL	
		1.1.1B	
11	$SS \rightarrow ME$	DROP LINK	
12	$ME \rightarrow SIM$		[Link dropped]
4.0		STATUS 1.3.1	
13	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING: GET	
14	ME → SIM	STATUS 1.3.1 FETCH	
15	···=	PROACTIVE COMMAND: GET STATUS 1.3.1	
16	$SIM \rightarrow ME$	TERMINAL RESPONSE: GET STATUS 1.3.1	[Command performed successfully]
10		TERMINAL RESPONSE, GET STATUS 1.3.1	[Command periorned successfully]

# PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM Destination device: ME

Event list

Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

**ENVELOPE EVENT DOWNLOAD: CHANNEL STATUS 1.3.1** 

Logically:

Event list

Event list: Channel Status

Device identities

Source device: ME Destination device: SIM

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	0A	82	02	82	81	B8	02	01
	05											

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

RER-TI V	DΩ	nα	81	വാ	01	44	00	82	02	81	82

TERMINAL RESPONSE: GET STATUS 1.3.1

Logically:

Command details

Command number: 1

Command type: GET STATUS

Command qualifier: RFU

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	81	03	01	44	00	82	02	82	81	83	01	00
	B8	02	01	05								

## 27.22.4.31.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

## 27.22.5 Data Download to SIM

## 27.22.5.1 SMS-PP Data Download

## 27.22.5.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.5.1.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-PP Data Download facility as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 4.3, clause 5, clause 7.1, clause 12.1, clause 12.7 and clause 12.13.

### 27.22.5.1.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages to the SIM.

To verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00' or '91 XX'.

To verify that the ME returns the response data from the SIM back to the system Simulator in the TP-User-Data element of the RP-ACK message, if the SIM responds with '9F XX'.

### 27.22.5.1.4 Method of Test

#### 27.22.5.1.4.1 Initial conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

## 27.22.5.1.4.2 Procedure

### **Expected Sequence 1.1 Void**

# Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, GET RESPONSE, Acknowledgement)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-PP Data Download Message	
		1.2.1	
2	$ME \rightarrow USER$	The ME shall not display the	
		message or alert the user of a	
		short message waiting.	
3	ME  o SIM	ENVELOPE: SMS-PP	
	IVIL 7 OIIVI	DOWNLOAD 1.2.2	
4	$SIM \to ME$	RESPONSE DATA AVAILABLE	[SW1 / SW2 of '9F 0B']
5	$ME \to SIM$	GET RESPONSE	
6	$SIM \to ME$	SMS-PP Data Download SIM	
		Acknowledgement 1.2.4	
7	$ME \to SS$	SMS-PP Data Download SIM	
		Acknowledgement 1.2.4 in the TP-	
		User-Data element of the RP-ACK	
		message. The values of protocol	
		identifier and data coding scheme	
		in RP-ACK shall be as in the	
		original message.	

## **Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, FETCH, MORE TIME)**

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-PP Data Download Message	
		1.3.1	
2	$ME \rightarrow USER$	The ME shall not display the	
		message or alert the user of a	
		short message waiting	
3	$ME \rightarrow SIM$	ENVELOPE: SMS-PP	
		DOWNLOAD 1.3.2	
4	$SIM \rightarrow ME$		[SW1 / SW2 of '91 0B']
		PENDING: MORE TIME 1.3.4	
5	, 00	RP-ACK	
6	/ 0	FETCH	
7	$SIM \to ME$	PROACTIVE COMMAND: MORE	
		TIME 1.3.4	
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: MORE	
		TIME 1.3.5	
9	$SIM \to ME$	PROACTIVE SIM SESSION	
		ENDED	

PROACTIVE COMMAND: MORE TIME 1.3.4

Logically:

Command details

Command number: 1

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: SIM Destination device: ME

Coding:

BER-TLV:	D0	09	81	03	01	02	00	82	02	81	82
DLIX-ILV.	טט	03	01	03	UI	02	00	02	02	01	02

TERMINAL RESPONSE: MORE TIME 1.3.5

Logically:

Command details

Command number:

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 02 00 82 02 82 81 83 01 00

## Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-PP Data Download Message	
		1.4.1	
2	ME	The ME shall not display the	
		message or alert the user of a	
		short message waiting	
3	$ME \rightarrow SIM$	ENVELOPE: SMS-PP	
		DOWNLOAD 1.4.2	
4	$SIM \rightarrow ME$	SW1 / SW2 of '90 00'	
5	$ME \to SS$	RP-ACK	

## SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 1.4.1

Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

BER-TLV:	04	03	91	21	43	7F	16	89	10	10	00	00
	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

ENVELOPE: SMS-PP DOWNLOAD 1.2.2 / 1.3.2 / 1.4.2,

Logically:

SMS-PP Download

Device identities

Source device: Network
Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

**SMS TPDU** 

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group General Data Coding Compression Text is uncompressed

Message Class Class 2 SIM Specific Message

Alphabet 8 bit data

TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

Coding:

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	16	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

## **Expected Sequence 1.5 Void**

### Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class)

Step	Direction	MESSAGE / Action	Comments
1	$SS \rightarrow ME$	SMS-PP Data Download Message	
		1.6.1	
2	ME	The ME shall not display the	
		message or alert the user of a	
		short message waiting	
3	$ME \rightarrow SIM$	ENVELOPE: SMS-PP	
		DOWNLOAD 1.6.2	
4	$SIM \rightarrow ME$	SW1 / SW2 of '90 00'	
5	$ME \to SS$	RP-ACK	

### SMS-PP (Data Download) Message 1.6.1

### Logically:

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

**TP-DCS** 

Coding Group Data Coding / Message Class

Message Coding 8 bit data

Message Class Class 2 SIM Specific Message

TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

### Coding:

BER-TLV:	04	03	91	21	43	7F	F6	89	10	10	00	00
_	00	00	0D	53	68	6F	72	74	20	4D	65	73
	73	61	67	65								

### **ENVELOPE: SMS-PP DOWNLOAD 1.6.2**

### Logically:

SMS-PP Download

Device identities

Source device: Network
Destination device: SIM

Address

TON International number

NPI "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-DELIVER

TP-MMS No more messages waiting for the MS in this SC
TP-RP TP-Reply-Path is not set in this SMS-DELIVER
TP-UDHI TP-UD field contains only the short message
TP-SRI A status report will not be returned to the SME

TP-OA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "1234"

TP-PID SIM Data download

TP-DCS

Coding Group Data Coding / Message Class

Message Coding 8 bit data

Message Class Class 2 SIM Specific Message

TP-SCTS: 01/01/98 00:00:00 +0

TP-UDL 13

TP-UD "Short Message"

BER-TLV:	D1	2D	82	02	83	81	06	09	91	11	22	33
	44	55	66	77	F8	8B	1C	04	04	91	21	43
	7F	F6	89	10	10	00	00	00	00	0D	53	68
	6F	72	74	20	4D	65	73	73	61	67	65	

## SMS-PP Data Download SIM Acknowledgement 1.2.4

Coding:

												70
BER-TLV	:   50	)	68	69	6C	20	48	6F	6F	6B	65	72
		-										

## 27.22.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.2 to 1.6.

### 27.22.5.2 SMS-CB Data Download

## 27.22.5.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.5.2.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-CB Data Download facility as defined in:

• 3GPP TS 11.14 [15] clause 4.3, clause 5, clause 7.2, clause 12.5 and clause 12.7.

### 27.22.5.2.3 Test purpose

To verify that the ME transparently passes the "data download via SMS Cell Broadcast" messages to the SIM, which contain a message identifier found in  $EF_{CBMID}$ .

### 27.22.5.2.4 Method of Test

### 27.22.5.2.4.1 Initial conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

### 27.22.5.2.4.2 Procedure

# Expected Sequence 1.1 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-CB (DATA DOWNLOAD)	Message identifier '10 01'
		1.1	
2	$ME \to SIM$	ENVELOPE (SMS-CB	
		DOWNLOAD) 1.1	
3	$SIM \to ME$	SW1, SW2 '90 00'	

## SMS-CB (Data Download) Message 1.1

Logically:

Message Content

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1
Update number: 1
Message Identifier: "1001"

Data coding Scheme

Message Coding: 8 bit data
Message class: No message class

Page Parameter

Total number of pages: 1 Page number: 1

Content of message: "Cell Broadcast "...

### Coding:

BER-TLV:	C0	11	10	01	F4	11	43	65	6C	6C	20	42
	72	6F	61	64	63	61	73	74	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20								

### **ENVELOPE: SMS-CB DOWNLOAD 1.1**

Logically:

Cell Broadcast Download

Device identities

Source device: Network Destination device: SIM

Cell Broadcast page

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1 Update number: 1 Message Identifier: "1001"

Data coding Scheme

Message Coding: 8 bit data

Message class: No message class

Page Parameter
Number of pages: 1
Page number: 1

Content of message: "Cell Broadcast "...

BER-TLV:	D2	5E	82	02	83	81	8C	58	C0	11	10	01
	F4	11	43	65	6C	6C	20	42	72	6F	61	64
	63	61	73	74	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20

# Expected Sequence 1.2 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-CB (DATA DOWNLOAD)	Message identifier '10 01'
		1.1	
2	$ME \rightarrow SIM$	ENVELOPE (SMS-CB	
		DOWNLOAD) 1.1	
3	$SIM \to ME$		SW1/SW2 '91 0B'
4	$ME \to SIM$	FETCH 1.1	
5	$SIM \to ME$	PROACTIVE COMMAND:MORE	
		TIME 1.1	
6	$ME \to SIM$	TERMINAL RESPONSE	
7	$SIM \to ME$	SW1/SW2 '90 00'	SIM session ended

PROACTIVE COMMAND: MORE TIME 1.1

Logically:

Command details

Command number: 1

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME

Coding:

BER-TLV: D0	09 81	03 01	02 00	82	02	81	82
-------------	-------	-------	-------	----	----	----	----

TERMINAL RESPONSE: MORE TIME 1.1

Logically:

Command details

Command number: 1

Command type: MORE TIME

Command qualifier: "00"

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

	0.4	$\sim$	$\sim$ 1	$\sim$		ററ	~~	ററ	0.4	റാ		
IBER-TLV:					00						∩1	00
		UJ		UZ I		02	02	02		00		

## Expected Sequence 1.3 (SMS-CB (DATA DOWNLOAD), ME displays message)

Step	Direction	MESSAGE / Action	Comments
1	$SS \to ME$	SMS-CB (DATA DOWNLOAD) 1.2	Message identifier '0C 0C'
2a	ME → USER	ME may display the message	
2b		ME shall not download the CB	
		message to the SIM using	
		ENVELOPE (SMS-CB download)	
3	USER → ME	The user shall use a MMI dependent	[only if message has not been displayed in
		procedure to initiate the display of	step 2a]
		the received CB message	
4	ME → USER	ME displays the message	[only if message has not been displayed in
			step 2a]

### SMS-CB (Data Download) Message 1.2

### Logically:

Message Content

Serial Number

Geographical scope: Cell wide, normal display mode

Message code: 1 Update number: 1

Message Identifier: "0C0C"

Data coding Scheme

Message Coding: 8 bit data
Message class: No message class

Page Parameter

Total number of pages: 1
Page number: 1

Content of message: "Cell Broadcast".

# Coding:

BER-TLV:	C0	11	0C	0C	F4	11	43	65	6C	6C	20	42
	72	6F	61	64	63	61	73	74	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20	20	20	20	20	20	20	20	20
	20	20	20	20								

# 27.22.5.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.3.

# 27.22.6 CALL CONTROL BY SIM

# 27.22.6.1 Procedure for Mobile Originated calls

# 27.22.6.1.1 Definition and applicability

See clause 3.2.2.

# 27.22.6.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

• 3GPP TS 11.14 [15] clause 9.1.1.

## 27.22.6.1.3 Test purpose

To verify that for all call set-up attempts , even those resulting from a SET UP CALL proactive SIM command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the SIM, using the ENVELOPE (CALL CONTROL).

To verify that if the SIM responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the SIM.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to set up the call as proposed, not set up the call, set up a call using the data supplied by the SIM.

To verify that, in the case where the initial call set-up request results from a proactive SET UP CALL, if the call control result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

To verify that it is possible for the SIM to request the ME to set up an emergency call by supplying the number "112" as the response data.

### 27.22.6.1.4 Method of tests

#### 27.22.6.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and System Simulator and has performed the location update procedure.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

### 27.22.6.1.4.2 Procedure

# Expected Sequence 1.1 (CALL CONTROL BY SIM, set up call attempt by user, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM parameters]
		1.1.1A	·
		Or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.1.1B	parameters]
3	$SIM \to ME$	90 00	
4	$ME \to SS$	The ME sets up the call without	[Set up call to "+01234567890123456789"
		modification	

### **ENVELOPE CALL CONTROL 1.1.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

### **ENVELOPE CALL CONTROL 1.1.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

# Expected Sequence 1.2 (CALL CONTROL BY SIM , set up call attempt by user, allowed without modification)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM parameters]
		1.2.1 A	
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.2.1B	parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no
			modification"]
6	$ME \rightarrow SS$	The ME sets up the call without	[Set up call to "+01234567890123456789"]
		modification	

### **ENVELOPE CALL CONTROL 1.2.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

### **ENVELOPE CALL CONTROL 1.2.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

## **CALL CONTROL RESULT 1.2.1**

Logically:

Call control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

# Expected Sequence 1.3A (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET	[This test applies to MEs asking for user
		UP CALL 1.3.1 PENDING	confirmation before sending the
			ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	$\begin{array}{c} ME \to \\ USER \end{array}$	ME displays "+012340123456" during user confirmation phase.	
5	$\begin{array}{c} USER \to \\ ME \end{array}$	The user confirms the call set up	[user confirmation]
6	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.3.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.3.1B	[Option B shall apply for PCS1900 parameters]
7	$SIM \rightarrow ME$	9F 02	
8	$ME \rightarrow SIM$	GET RESPONSE	
9	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]
10	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "+012340123456"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

# Expected Sequence 1.3 B (CALL CONTROL BY SIM, set up call attempt resulting from a set up call proactive command, allowed without modification)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET	[This test applies to MEs asking for user
		UP CALL 1.3.1 PENDING	confirmation after sending the
			ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP CALL 1.3.1	[Set up call to "+012340123456"]
4	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.3.1A	[Option A shall apply for GSM parameters]
		or	
		ENVELOPE CALL CONTROL 1.3.1B	[Option B shall apply for PCS1900 parameters]
5	$SIM \to ME$	9F 02	
6	$ME \rightarrow SIM$	GET RESPONSE	
7	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.3.1	[Call control result: "Allowed, no modification"]
8	ME  o	ME displays "+012340123456"	-
	USER	during user confirmation phase.	
9	$\begin{array}{c} USER \to \\ ME \end{array}$	The user confirms the call set up	[user confirmation]
10	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "+012340123456"]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.3.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

## **ENVELOPE CALL CONTROL 1.3.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	F1	10
	00	01	00	01	Note 4						

### **ENVELOPE CALL CONTROL 1.3.1B**

### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.3.1**

Logically:

Call control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

TERMINAL RESPONSE: SET UP CALL 1.3.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
D = 1 \ 1 = \ 1		00			00		~_				<b>.</b>	00

### Expected Sequence 1.4 (CALL CONTROL BY SIM, set up call attempt by user, not allowed)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.4.1 A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		1.4.1B	parameters]
3	$SIM \to ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
6	$ME \rightarrow SS$	The ME does not set up the call	

### **ENVELOPE CALL CONTROL 1.4.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

### **ENVELOPE CALL CONTROL 1.4.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "+01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001) Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.4.1**

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV: 01 00

# Expected Sequence 1.5A (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to "+012340123456"
4	$ME \to USER$	ME displays "+012340123456" during user confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	ME  o SIM	ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
7	$SIM \rightarrow ME$	9F 02	parametersj
8	ME → SIM	GET RESPONSE	
9	$SIM \to ME$	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"]
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.5.1	[Permanent Problem - Interaction with Call Control by SIM]
11	$ME \to SS$	The ME does not set up the call	

# Expected Sequence 1.5 B (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.5.1	[Set up call to "+012340123456"
4	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.5.1A or ENVELOPE CALL CONTROL 1.5.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
5	$SIM \rightarrow ME$	9F 02	parameters
6	$ME \rightarrow SIM$	GET RESPONSE	
7	$SIM \to ME$	CALL CONTROL RESULT 1.5.1	[Call control result: "Not Allowed"] [No user confirmation phase because Call Control has disallowed the request]
8	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.5.1	[Permanent Problem - Interaction with Call Control by SIM]
9	$ME \to SS$	The ME does not set up the call	

PROACTIVE COMMAND: SET UP CALL 1.5.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

#### **ENVELOPE CALL CONTROL 1.5.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note	02	02	82	81	06	07	91	10	32
		1									
	04	21	43	65	Note	Note	13	07	00	F1	10
					2	3					
	00	01	00	01	Note						
					4						

### **ENVELOPE CALL CONTROL 1.5.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

#### Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets

### **CALL CONTROL RESULT 1.5.1**

Logically:

Call control result: '01' = not Allowed

Coding:

BER-TLV: 01 00

### TERMINAL RESPONSE: SET UP CALL 1.5.1

Logically:

Command details

Command number:

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Interaction with call control by SIM or MO short message control by SIM,

permanent problem

Additional information: Action not allowed

BER-TLV:	81	03	01	10	00	82	02	82	81	83	02	39
	01											

# Expected Sequence 1.6 (CALL CONTROL BY SIM, set up call attempt by user, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+01234567890123456789"	
2	$ME \rightarrow SIM$	1.6.1 A or	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 07	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications", ]
6	$ME \to SS$	The ME sets up the call to "+010203"	

### **ENVELOPE CALL CONTROL 1.6.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

### **ENVELOPE CALL CONTROL 1.6.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.6.1**

Logically:

Call control result: '02' = Allowed with modifications

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "010203"

BER-TLV:	02	06	86	04	91	10	20	30
DEK-ILV.	02	00	00	U <del>4</del>	91	10	20	30

# Expected Sequence 1.7A (CALL CONTROL BY SIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation before sending the ENVELOPE CALL CONTROL command]
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	$ME \to USER$	ME displays "+012340123456" during user confirmation phase.	
5	$USER \to ME$	The user confirms the call set up	[user confirmation]
6	$ME \to SIM$	ENVELOPE CALL CONTROL 1.7.1A or ENVELOPE CALL CONTROL 1.7.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
7	$SIM \to ME$	9F 0B	
8	$ME \rightarrow SIM$	GET RESPONSE	
9	$SIM \to ME$	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
10	$ME \to SS$	The ME sets up the call to "+0111111111111"	
11	$ME \to SIM$	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

# Expected Sequence 1.7 B (CALL CONTROL BY SIM, set up call attempt resulting from a set up call proactive command, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1 PENDING	[This test applies to MEs asking for user confirmation after sending the ENVELOPE CALL CONTROL command]
2	ME→SIM	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP CALL 1.7.1	[Set up call to "+012340123456"]
4	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.7.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.7.1B	[Option B shall apply for PCS1900 parameters]
5	$SIM \to ME$	9F 0B	
6	$ME \to SIM$	GET RESPONSE	
7	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.7.1	[Call control result: "Allowed with modifications"]
8	$ME \to USER$	ME displays "+012340123456" during user confirmation phase.	
9	$USER \to ME$	The user confirms the call set up	[user confirmation]
10	$ME \rightarrow SS$	The ME sets up the call to "+0111111111111"	[call is set up to modified address]
11	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP CALL 1.7.1	[command performed successfully]

PROACTIVE COMMAND: SET UP CALL 1.7.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

### Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

# **ENVELOPE CALL CONTROL 1.7.1A**

### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	F1	10
	00	01	00	01	Note 4						

### **ENVELOPE CALL CONTROL 1.7.1B**

## Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012340123456"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	02	02	82	81	06	07	91	10	32
	04	21	43	65	Note 2	Note 3	13	07	00	11	10
	00	01	00	01	Note 4						

Note 1: Length of BER-TLV is '16' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.7.1**

Logically:

Call control result: '02' = Allowed with modifications

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01111111111"

Coding:

BER-TLV: 02 09 86 07 91 10 11 11 11 11	91 10 11 11 11 11 11	91	07	86	na	02	IDEK-ILV.
--	----------------------	----	----	----	----	----	-----------

### TERMINAL RESPONSE: SET UP CALL 1.7.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

	Ī	BER-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
--	---	----------	----	----	----	----	----	----	----	----	----	----	----	----

# Expected Sequence 1.8 (CALL CONTROL BY SIM, set up call attempt by user, allowed with modifications: emergency call)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL 1.8.1A	[Option A shall apply for GSM
			parameters]
		or	
		ENVELOPE CALL CONTROL 1.8.1B	[Option B shall apply for PCS1900
			parameters
3	$SIM \to ME$	9F 06	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 1.8.1	[Call control result: "Allowed with
			modifications"]
6	$ME \to SS$	The ME sets up an emergency call;	

### **ENVELOPE CALL CONTROL 1.8.1A**

### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

# **ENVELOPE CALL CONTROL 1.8.1B**

### Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.8.1**

Logically:

Call control result Allowed, with modification

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "112"

Coding:

BER-TLV:	02	05	86	03	81	11	F2
DLIX-ILV.	02	00	00	00	01		_

# Expected Sequence 1.9 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications: number in $\mathsf{EF}_{\mathsf{ECC}}$ )

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to	
		"+01234567890123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		1.9.1A	parameters]
		or	
		ENVELOPE CALL CONTROL 1.9.1B	[Option B shall apply for PCS1900
			parameters]
3	$SIM \to ME$	9F 06	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.9.1	[Call control result: "Allowed with
			modifications"]
6	$ME \to SS$	The ME sets up call with the dialled	
		digits "1020". The ME does not set	
		up an emergency call, but stes up a	
		normal call	

### **ENVELOPE CALL CONTROL 1.9.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	F1	10	00	01	00	01	Note 4					

## **ENVELOPE CALL CONTROL 1.9.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "01234567890123456789"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

BER-TLV:	D4	Note 1	82	02	82	81	86	0B	91	10	32	54
	76	98	10	32	54	76	98	Note 2	Note 3	13	07	00
	11	10	00	01	00	01	Note 4					

Note 1: Length of BER-TLV is '1A' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESULT 1.9.1**

### Logically:

Call control result Allowed, with modification

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "1020"

Coding:

BER-TLV:	02	05	86	03	81	01	02

### Expected Sequence 1.10 (CALL CONTROL BY SIM, set up call attempt by user to an emergency call)

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "112"	
2	$ME \rightarrow SIM$	The ME does not send any	
		ENVELOPE CALL CONTROL	
3	$ME \to SS$	The ME sets up an emergency	
		call	

# Expected Sequence 1.11 (CALL CONTROL BY SIM , set up call through call register, the SIM responds with '90 00')

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL 1.1.1A	[Option A shall apply for GSM parameters]
	OIM ME	or ENVELOPE CALL CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	90 00	
4	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
5	$USER \to ME$	End Call.	
6	$USER \to ME$	Recall the last dialled number	
7	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.1.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900 parameters]
8	$SIM \to ME$	90 00	[
9			[Set up call to "+01224567900122456790"]
9	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
10	$USER \to ME$	End Call.	

## Expected Sequence 1.12 (CALL CONTROL BY SIM, set up call through call register, allowed without modification)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.2.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.2.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.2.1	[Call control result: "Allowed, no modification"]
6	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]
7	$User \to ME$	End the call then call the last dialled number	
8	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.2.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900 parameters]
9	$SIM \to ME$	9F 02	[Call control result: "Allowed, no modification"]
10	$ME \to SIM$	GET RESPONSE	-
11	$SIM \to ME$	CALL CONTROL RESULT 1.2.1	
12	$ME \to SS$	The ME sets up the call without modification	[Set up call to "+01234567890123456789"]

## Expected Sequence 1.13 (CALL CONTROL BY SIM, set up call through call register, not allowed)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers not allowed by call control in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.4.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.4.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
6	$ME \rightarrow SS$	The ME does not set up the call	
7	$User \to ME$	The user calls the last dialled number	
8	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		or	parameters]
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
9	SIM  o ME	9F 02	parameters]
10	$ME \rightarrow SIM$	GET RESPONSE	
10	IVIL -> SIIVI	OLI ILLOI OIVOL	
11	$SIM \to ME$	CALL CONTROL RESULT 1.4.1	[Call control result: "not Allowed"]
12	$ME \to SS$	The ME does not set up the call	

# Expected Sequence 1.14 (CALL CONTROL BY SIM , set up call through call register, allowed with modifications)

Pre-condition: the ME has a mean to register the last dialled number(s), and the ME will store dialled numbers allowed with modification in its register.

Step	Direction	Message / Action	Comments
1	$User \to ME$	Set up a call to "+0123456789"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.6.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.6.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 07	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
6	$ME \to SS$	The ME sets up the call to "+010203"	-
7	$User \to ME$	Set up a call to "+0123456789"	
8	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL 1.6.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE CALL CONTROL 1.6.1B	[Option B shall apply for PCS1900 parameters]
9	$SIM \to ME$	9F 07	
10	$ME \to SIM$	GET RESPONSE	
11	$SIM \to ME$	CALL CONTROL RESULT 1.6.1	[Call control result: "Allowed with modifications"]
12	$ME \rightarrow SS$	The ME sets up the call to "+010203"	-

### 27.22.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.14.

## 27.22.6.2 Procedure for Supplementary (SS) Services

### 27.22.6.2.1 Definition and applicability

See clause 3.2.2.

## 27.22.6.2.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

• 3GPP TS 11.14 [15] clause 9.1.2.

## 27.22.6.2.3 Test purpose

To verify that the ME first pass the supplementary service control string corresponding to the supplementary service operation to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

To verify that, if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the supplementary service operation as proposed, not send the SS operation, or instead send the SS operation using the data supplied by the SIM.

### 27.22.6.2.4 Method of tests

### 27.22.6.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

### 27.22.6.2.4.2 Procedure

## Expected Sequence 2.1 (CALL CONTROL BY SIM, send SS, the SIM responds with '90 00')

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user selects the facility of the	
		ME which requires an	
		unconditional call forward	
		supplementary service operation	
		to be sent to the network (System	
		Simulator).	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	Option A shall apply for GSM
		2.1.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.1.1B	parameters
3	$SIM \rightarrow ME$	90 00	
4	$ME \rightarrow SS$	REGISTER 2.1	[The ME sends the supplementary
			service operation with the information as
			sent to the SIMI
5	$SS \rightarrow ME$	RELEASE COMPLETE (SS	,
		RETURN RESULT) 2.1	

### **ENVELOPE CALL CONTROL 2.1.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

## **ENVELOPE CALL CONTROL 2.1.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

## **REGISTER 2.1**

Logically (only SS argument):

## ACTIVATE SS ARGUMENT

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

## Coding:

I	BER-TLV	30	06	04	01	21	83	01	00		

## RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from operation code):

## ACTIVATE SS RETURN RESULT

Forwarding Info

SS-Code

- Call Forwarding Unconditional

Forward Feature List

ForwardingFeature

TeleserviceCode

- All Tele Services

SS-Status

- state ind.: operative

provision ind.: provisionedregistration ind.: registered

- activation ind.: active

BER-TLV	0C	A0	0D	04	01	21	30	08	30	06	83	01
	00	84	01	07								

## Expected Sequence 2.2 (CALL CONTROL BY SIM, send SS, allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user selects the facility of the	
		ME which requires an	
		unconditional call forward	
		supplementary service operation	
		to be sent to the network (System	
		Simulator).	ro .:
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.2.1A	parameters]
		or ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.2.1B	parameters]
3	$SIM \rightarrow ME$		parameters
4	_	GET RESPONSE	
	IVIL / OIIVI	02.11(20.01102	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 2.2.1	[Call control result: "Allowed without
			modifications"]
6	$ME \to SS$	REGISTER 2.1	The ME sends the supplementary service
			operation with the information as sent to
			the SIM
7	$SS \to ME$	RELEASE COMPLETE (SS	
		RETURN RESULT) 2.1	

### **ENVELOPE CALL CONTROL 2.2.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

## **ENVELOPE CALL CONTROL 2.2.1B**

Logically:

Device identities

Source device: ME
Destination device: SIM

SS String

TON/NPI: "FF"
Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

## **CALL CONTROL RESPONSE 2.2.1**

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV: 00 00

## Expected Sequence 2.3 (CALL CONTROL BY SIM, send SS, not allowed)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user selects the facility of the	
		ME which requires an	
		unconditional call forward	
		supplementary service operation	
		to be sent to the network (System	
		Simulator).	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.3.1B	parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 2.3.1	[Call control result: "Not Allowed"]
6	ME  o SS	The ME does not send the	
		supplementary service operation	

### **ENVELOPE CALL CONTROL 2.3.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: Unknown Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

## **ENVELOPE CALL CONTROL 2.3.1B**

Logically:

Device identities

Source device: ME

Destination device: SIM

SS String

TON/NPI: Unknown Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	11	10	00	01	00	01				

### **CALL CONTROL RESPONSE 2.3.1**

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

## Expected Sequence 2.4 (CALL CONTROL BY SIM, send SS, allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user selects the facility of the	
		ME which requires an	
		unconditional call forward	
		supplementary service operation	
		to be sent to the network (System Simulator).	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		2.4.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		2.4.1B	parameters]
3	$SIM \rightarrow ME$		
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \rightarrow ME$	CALL CONTROL RESULT 2.4.1	[Call control result: "Allowed with
			modifications"]
6	$ME \to SS$	REGISTER 2.4	[The ME sends the supplementary
			service operation with the information as sent by the SIM]
7	$SS \to ME$	RELEASE COMPLETE (SS	
		RETURN RESULT) 2.4	

## **ENVELOPE CALL CONTROL 2.4.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: Unknown Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
	07	00	F1	10	00	01	00	01				

### **ENVELOPE CALL CONTROL 2.4.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

SS String

TON/NPI: Unknown Dialling number string "\*21#"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D4	12	82	02	82	81	89	03	FF	2A	B1	13
<u> </u>	07	00	11	10	00	01	00	01				_

### **CALL CONTROL RESPONSE 2.4.1**

Logically:

Call control result Allowed, with modifications

SS String

TON/NPI "FF" SS String "\*#21#"

Coding:

BER-TLV:   02   06   89	04   F	FF   BA	12   FB
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## **REGISTER 2.4**

Logically (only SS argument):

INTERROGATE SS ARGUMENT

SS-Code

- Call Forwarding Unconditional

Coding:

BER-TLV 30	03	04	01	21
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## RELEASE COMPLETE (SS RETURN RESULT) 2.4

Logically (only from operation code):

INTERROGATE SS RESULT

Call Forwarding Unconditional

SS-Status

- state ind .: operative

provision ind.: provisionedregistration ind.: registeredactivation ind.: not active

Coding:

BER-TLV	80	01	06			

### 27.22.6.2.5 Test requirement

The ME shall operate in the manner defined in expected sequences 2.1 to 2.4.

## 27.22.6.3 Interaction with Fixed Dialling Number (FDN)

### 27.22.6.3.1 Definition and applicability

See clause 3.2.2.

## 27.22.6.3.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

• 3GPP TS 11.14 [15] clause 9.1.4.

### 27.22.6.3.3 Test purpose

To verify that the ME checks that the number entered through the MMI is on the FDN list.

To verify that, if the MMI input does not pass the FDN check, the call shall not be set up.

To verify that, if the MMI input does pass the FDN check, the ME shall pass the dialled digits and other parameters to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the SIM responds with "not allowed", the ME shall not set up the call.

To verify that, if the SIM responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the SIM. If the modifications involve changing the dialled digits, the ME shall not re-check this modified number against the FDN list.

### 27.22.6.3.4 Method of tests

## 27.22.6.3.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

The GSM parameters of the system simulator are:

• Mobile Country Code (MCC) = 001;

- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.6.3.4.2 Procedure

## Expected Sequence 3.1 (CALL CONTROL BY SIM, set up a call not in EF<sub>FDN</sub>)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "4321"	
2	, , , , , , , , , , , , , , , , , , , ,	The ME does not send the ENVELOPE (CALL CONTROL) command to the SIM.	
3	$ME \rightarrow SS$	The ME does not set up the call.	

## Expected Sequence 3.2 (CALL CONTROL BY SIM , set up a call in $\mathsf{EF}_\mathsf{FDN}$ , the SIM responds with '90 00')

S	Step	Direction	Message / Action	Comments
	1	$User \to ME$	The user sets up a call to "123"	
	2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
			3.2.1A	parameters]
			or	
			ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
			3.2.1B	parameters]
	3	$SIM \to ME$	90 00	
	4	$ME \to SS$	The ME sets up the call without	[Set up call to "123"]
			modification	

### **ENVELOPE CALL CONTROL 3.2.1A**

## Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 3.2.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

## Expected Sequence 3.3 (CALL CONTROL BY SIM , set up a call in $\mathsf{EF}_\mathsf{FDN}$ , Allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "9876"	
2	$ME \rightarrow SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		3.3.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		3.3.1B	parameters]
3	$SIM \to ME$		
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 3.3.1	[Call control result: "Allowed without
			modifications"]
6	$ME \to SS$	The ME sets up the call without	[Set up call to "9876"]
		modification	

### **ENVELOPE CALL CONTROL 3.3.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 3.3.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)

Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets

### **CALL CONTROL RESPONSE 3.3.1**

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV: 00 00

### Expected Sequence 3.4 (CALL CONTROL BY SIM, set up a call in EF<sub>FDN</sub>, Not Allowed)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "9876"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		3.4.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		3.4.1B	parameters]
3	$SIM \to ME$	9F 02	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 3.4.1	[Call control result: "Not Allowed"]
6	$ME \to SS$	The ME does not set up the call	

### **ENVELOPE CALL CONTROL 3.4.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 3.4.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 3.4.1**

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

## Expected Sequence 3.5 (CALL CONTROL BY SIM, set up a call in EF<sub>FDN</sub>, Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "9876"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		3.5.1A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		3.5.1B	parameters]
3	$SIM \to ME$	9F 07	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 3.5.1	[Call control result: "Allowed with
			modifications"]
6	$ME \to SS$	The ME sets up the call with data	[Set up call to "3333"]
		sent by the SIM	

### **ENVELOPE CALL CONTROL 3.5.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

## **ENVELOPE CALL CONTROL 3.5.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	89	67	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 3.5.1**

Logically:

Call control result Allowed with modifications

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "3333"

Coding:

BER-TLV:	02	05	86	03	81	33	33

### 27.22.6.3.5 Test requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.5.

## 27.22.6.4 Support of Barred Dialling Number (BDN) service

## 27.22.6.4.1 Definition and applicability

See clause 3.2.2.

## 27.22.6.4.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in:

• 3GPP TS 11.14 [15] clause 9.1.5.

## 27.22.6.4.3 Test purpose

To verify that, if Barred Dialling Number service is enabled, the ME checks the number entered through the MMI against  $EF_{BDN}$ .

To verify that, if the SIM responds with "not allowed", the ME does not set up the call.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

To verify that, if the SIM responds with "allowed with modifications", the ME sets up the call in accordance with the response from the SIM. If the modifications involve changing the dialled number the ME does not re-check this modified number against the FDN list when FDN is enabled.

## 27.22.6.4.4 Method of tests

#### 27.22.6.4.4.1 Initial conditions

The ME is connected to the SIM Simulator and the Systems Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

Barred Dialling Number service is enabled.

Prior to the execution of expected sequence 4.4 the FDN service shall be enabled.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

### 27.22.6.4.4.2 Procedure

### Expected Sequence 4.1 (CALL CONTROL BY SIM, set up a call in EF<sub>BDN</sub>)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "321"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL 4.1.1A	[Option A shall apply for GSM parameters]
3	SIM  o ME	or ENVELOPE CALL CONTROL 4.1.1B 9F 02	[Option B shall apply for PCS1900 parameters]
_		** *=	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.1.1	[Call control result: "Not Allowed"]
6	$ME \to SS$	The ME does not set up the call	

### **ENVELOPE CALL CONTROL 4.1.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "321" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	23	F1	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

## **ENVELOPE CALL CONTROL 4.1.1B**

### Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "321" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	23	F1	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 4.1.1**

Logically:

Call control result Not Allowed

Coding:

BER-TLV: 01 00

## Expected Sequence 4.2 (CALL CONTROL BY SIM , set up a call not in $EF_{BDN}$ , Allowed without modifications)

Step	Direction	Message / Action	Comments
1	$User \rightarrow ME$	The user sets up a call to "1234"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL	[Option A shall apply for GSM
		4.2.11A	parameters]
		or	
		ENVELOPE CALL CONTROL	[Option B shall apply for PCS1900
		4.2.1B	parameters]
3	$SIM \rightarrow ME$	9F 02	
4	$ME \rightarrow SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.2.1	[Call control result: "Allowed without
			modifications"]
6	$ME \rightarrow SS$	The ME sets up the call without modification	[Set up call to "1234"]

## **ENVELOPE CALL CONTROL 4.2.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1234" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	43	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 4.2.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1234" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

Location Information

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	43	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

- Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.
- Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.
- Note 3: Subaddress may be present at this place. If present, it may take up several octets.
- Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 4.2.1**

Logically:

Call control result Allowed, no modifications

Coding:

BER-TLV: 00 00

## Expected Sequence 4.3 (CALL CONTROL BY SIM , set up a call not in $\mathsf{EF}_{\mathsf{BDN}}$ , Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "1111"	
2	$ME \to SIM$	4.3.1A	[Option A shall apply for GSM parameters]
		or ENVELOPE CALL CONTROL 4.3.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 07	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$		[Call control result: "Allowed with modifications"]
6	$ME \to SS$	The ME sets up the call with data sent by the SIM	[Set up call to "2222"]

### **ENVELOPE CALL CONTROL 4.3.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1111" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

the mobile country and network code (00F110) MCC & MNC

the location Area Code (0001) LAC Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 4.3.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "1111" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001) Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	11	11	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 4.3.1**

Logically:

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "2222"

Coding:

BER-TLV:	02	05	86	03	81	22	22
DEIX IEV.	02	00	00	00	0.		

## Expected Sequence 4.4 (CALL CONTROL BY SIM , FDN and BDN enabled, set up a call in $EF_{FDN}$ , Allowed with modifications)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user sets up a call to "123"	
2	$ME \to SIM$	ENVELOPE CALL CONTROL 4.4.1A	[Option A shall apply for GSM parameters]
		Or ENVELOPE CALL CONTROL 4.4.1B	[Option B shall apply for PCS1900 parameters]
3	$SIM \to ME$	9F 0A	
4	$ME \to SIM$	GET RESPONSE	
5	$SIM \to ME$	CALL CONTROL RESULT 4.4.1	[Call control result: "Allowed with modifications"]
6	$ME \to SS$	The ME sets up the call with data sent by the SIM	[Set up call to "987654321"the ME does not re-check this modified number against the FDN list]

### **ENVELOPE CALL CONTROL 4.4.1A**

Logically:

Device identities

Source device: ME
Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123" Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

### Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	F1	10	00	01	00	01	Note 4	

### **ENVELOPE CALL CONTROL 4.4.1B**

Logically:

Device identities

Source device: ME Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "123"

Capability configuration parameters 1

This parameter is optional. If present, the contents shall not be checked.

Subaddress

This parameter is optional. If present, the contents shall not be checked.

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Capability configuration parameters 2

This parameter is optional. If present, the contents shall not be checked.

Coding:

BER-TLV:	D4	Note 1	82	02	82	81	86	03	81	21	F3	Note 2
	Note 3	13	07	00	11	10	00	01	00	01	Note 4	

Note 1: Length of BER-TLV is '12' plus the actual length of all the present optional SIMPLE-TLV data objects.

Note 2: Capability configuration parameters 1 may be present at this place. If present, it may take up several octets.

Note 3: Subaddress may be present at this place. If present, it may take up several octets.

Note 4: Capability configuration parameters 2 may be present at this place. If present, it may take up several octets.

### **CALL CONTROL RESPONSE 4.4.1**

Logically:

Call control result Allowed with modifications

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "987654321"

BER-TLV:	02	08	86	06	01	89	67	15	22	E1
IDEK-ILV.	l UZ	l Uo	מסו	טט ו	01	09	67	I 40	L 23	ГГ

## 27.22.6.4.5 Test requirement

The ME shall operate in the manner defined in expected sequences 4.1 to 4.4.

## 27.22.7 EVENT DOWNLOAD

## 27.22.7.1 MT Call Event

## 27.22.7.1.1 MT Call Event (normal)

### 27.22.7.1.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.1.1.2 Conformance requirement

The ME shall support the EVENT: MT Call event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

### 27.22.7.1.1.3 Test purpose

To verify that the ME informs the SIM the an Event: MT Call has occurred using the ENVELOPE (EVENT DOWNLOAD - MT Call) command.

### 27.22.7.1.1.4 Method of test

## 27.22.7.1.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

### 27.22.7.1.1.4.2 Procedure

### **Expected Sequence 1.1 (EVENT DOWNLOAD -MT Call event)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.1.1	
5	$SS \to ME$	CALL SET UP without CLI	[MT Call Set Up Without CLI]
6	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- MT Call 1.1.1	
7	$SS \rightarrow ME$	CALL DISCONNECT	
8	$SS \to ME$	CALL SET UP with CLI	[MT Call Set Up With CLI]
9	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- MT Call 1.1.2	
10	$SS \to ME$	CALL DISCONNECT	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: MT call

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99 01 00

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

**EVENT DOWNLOAD - MT CALL 1.1.1** 

Logically:

Event list: MT call event

Device identities

Source device: Network Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Coding:

BER-TLV: D6 0A 19 01 00 82 02 83 81 1C 01 00

**EVENT DOWNLOAD - MT CALL 1.1.2** 

Logically:

Event list: MT call event

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Address:

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876"

### Coding:

BER-TLV:	D6	0F	19	01	00	82	02	83	81	1C	01	00
	86	03	90	89	67							

### 27.22.7.1.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

### 27.22.7.2 Call Connected Event

## 27.22.7.2.1 Call Connected Event (MT and MO call)

### 27.22.7.2.1.1 Definition and applicability

See clause 3.2.2.

### 27.22.7.2.1.2 Conformance requirement

The ME shall support the EVENT: Call Connected event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.2 and clause 12.25.

### 27.22.7.2.1.3 Test purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

## 27.22.7.2.1.4 Method of test

### 27.22.7.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

### 27.22.7.2.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD -CALL CONNECTED)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Call Connected active]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	
5	$SS \to ME$	SETUP	[MT Call] Ti = 0
6	$\begin{array}{c} USER \to \\ ME \end{array}$	Accept Call Set Up	
7		CONNECT	
8	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.1	
9	$SS \rightarrow ME$	DISCONNECT	
10	$\begin{array}{c} USER \to \\ ME \end{array}$	Initiate Call to "123"	
11	$ME \rightarrow SS$	SETUP	[MO Call] Ti = 0
12		CONNECT	
13	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	
		- Call Connected 1.1.1	
14	$\begin{array}{c} USER \to \\ ME \end{array}$	End Call	
15	$ME \rightarrow SS$	DISCONNECT	

### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
•	01	01										

## TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00
D = 1 \ 1 = \ 1 .	<b>.</b>	00	, o.	00	00	_ <del>_</del>			, o.		<b>O</b> .	

### **EVENT DOWNLOAD - CALL CONNECTED 1.1.1**

Logically:

Event list: Call connected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	82	81	1C	01	80

### **EVENT DOWNLOAD - CALL CONNECTED 1.1.2**

Logically:

Event list: Call connected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

Coding:

BER-TLV:	De	ΛΛ	19	Ω1	01	92	02	92	01	10	Λ1	80
DEK-ILV.	D6	0A	19	UI	01	02	02	೦೦	01	10	UI	00

### 27.22.7.2.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.2.2 Call Connected Event (ME supporting SET UP CALL)

27.22.7.2.2.1 Definition and applicability

See clause 3.2.2.

### 27.22.7.2.2.2 Conformance requirement

Additionally the ME shall support the SET UP CALL Proactive SIM Command as defined in:

• 3GPP TS 11.14 [15] clause 11.2.2, clause 6.4.13 and clause 6.6.12.

## 27.22.7.2.2.3 Test purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Connected) command.

27.22.7.2.2.4 Method of test

27.22.7.2.2.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.2.4.2 Procedure

## **Expected Sequence 2.1 (EVENT DOWNLOAD -CALL CONNECTED, ME supporting SET UP CALL)**

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[EVENT: Call Connected active]
		EVENT LIST 2.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
_	0114 145	EVENT LIST 2.1.1	
5	SIM → ME	PROACTIVE COMMAND PENDING	
6	$ME \rightarrow SIM$	_	
7		PROACTIVE COMMAND: SET UP	ISAT Calli
<b>'</b>	SIIVI → IVIE	CALL 2.1.1	[SAT Call]
8	ME	ME displays "+012340123456"	ME BEHAVIOUR: SET UP CALL
	→ USER	during the user confirmation	
		phase.	
9	$USER \to$	Confirm call set up	
	ME		
10	$ME \rightarrow SS$		Ti=0
11	$SS \rightarrow ME$	CONNECT	
12	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		CALL 2.1.1	
13	$ME \rightarrow SIM$	ENVELOPE: CALL CONNECTED	
		2.1.1	

## PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1

Logically:

Command details

Command number: 1

SET UP EVENT LIST Command type:

Command qualifier:

Device identities

Source device: SIM Destination device: ME

Event list

Event 1: Call Connected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	01										

## TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1

Logically:

Command details

Command number: 1 Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 8	31 03	01 0	5 00	82	02	82	81	83	01	00	
------------	-------	------	------	----	----	----	----	----	----	----	--

### PROACTIVE COMMAND: SET UP CALL 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network

Alpha identifier: "+012340123456"

Address

TON: International

NPI: "ISDN / telephone numbering plan"

Dialling number string "012340123456"

Coding:

BER-TLV:	D0	21	81	03	01	10	00	82	02	81	83
	05	0D	2B	30	31	32	33	34	30	31	32
	33	34	35	36	86	07	91	10	32	04	21
	43	65									

### TERMINAL RESPONSE: SET UP CALL 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BEF	R-TLV:	81	03	01	10	00	82	02	82	81	83	01	00
-----	--------	----	----	----	----	----	----	----	----	----	----	----	----

### **EVENT DOWNLOAD - CALL CONNECTED 2.1.1**

Logically:

Event list: Call connected

Device identities

Source device: Network

Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Coding:

BER-TLV:	D6	0A	19	01	01	82	02	83	81	1C	01	80

### 27.22.7.2.2.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

### 27.22.7.3 Call Disconnected Event

### 27.22.7.3.1 Call Disconnected Event

## 27.22.7.3.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.3.1.2 Conformance requirement

The ME shall support the EVENT: Call Disconnected event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.3 and clause 12.25.

### 27.22.7.3.1.3 Test purpose

To verify that the ME informs the SIM the an Event: Call Disconnected has occurred using the ENVELOPE (EVENT DOWNLOAD -Call Disconnected) command.

### 27.22.7.3.1.4 Method of test

### 27.22.7.3.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

## 27.22.7.3.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD -CALL DISCONNECTED)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING	
2	$ME \rightarrow SIM$		IFVENT: Call Disconnected active)
3	SIM → ME	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT. Call Disconnected active]
4	MF → SIM	TERMINAL RESPONSE: SET UP	
	VIL	EVENT LIST 1.1.1	
5	$SS \to ME$	SETUP	[ incoming call ] Ti=0
6		Accept Call Set Up	
_	ME		
7		DISCONNECT	[MT DISCONNECT]
8	ME→ SIM	ENVELOPE: CALL DISCONNECTED 1.1.1	
9	$SS \rightarrow ME$	ISETUP	[ incoming call ] Ti=0
10		Accept Call Set Up	[ mooning sam ] Ti=0
	ME		
11	$SS \to ME$		[MT RELEASE]
12	$ME {\to} SIM$	ENVELOPE: CALL	
40		DISCONNECTED 1.1.1	
13	$SS \rightarrow ME$	SETUP	[ incoming call ] Ti=0
14	$USER \to ME$	Accept Call Set Up	
15		RELEASE COMPLETE	[MT RELEASE COMPLETE]
16		ENVELOPE: CALL	[ 1.2227.02 00 22.12]
		DISCONNECTED 1.1.1	
17	$SS \to ME$	SETUP	[ incoming call ] Ti=0
18		Accept Call Set Up	
40	ME	F10-11	
19	$USER \to ME$	End Call	
20		DISCONNECT	[MO DISCONNECT]
21		ENVELOPE: CALL	[me siecermizer]
		DISCONNECTED 1.1.2A	
		or	
		ENVELOPE: CALL	
		DISCONNECTED 1.1.2B	
		ENVELOPE: CALL	
		DISCONNECTED 1.1.2C	
22	$SS \to ME$	SETUP	[ incoming call ] Ti=0
23	$USER \to$	Accept Call Set Up	
	ME		
24	$SS \to ME$	DISCONNECT	[MT DISCONNECT + CAUSE: normal call
25	ME→ SIM	ENVELOPE: CALL	clearing ]
20	IVIL— SIIVI	DISCONNECTED 1.1.3A	
		or	
		ENVELOPE: CALL	
00		DISCONNECTED 1.1.3B	
26	$SS \rightarrow ME$	SETUP	Ti=0
27	USER  o ME	Accept Call Set Up	
28	SS	TX POWER to XX	[RADIO LINK FAILURE]
29		ENVELOPE: CALL	[
		DISCONNECTED 1.1.4A or 1.1.4B	

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Call Disconnected

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	02										

### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	01	02	01	05	00	0.2	02	0.2	01	02	Ω1	00
DEK-ILV.	01	03	UI	UO	UU	02	02	02	01	೦೦	UI	UU

## **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.1**

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause:

Coding:

### **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2A**

Logically:

Event list: Call Disconnected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Coding:

ER-TLV: D6 0A 19	01 02 82	02 82 81	1C 01 80
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## **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2B**

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 1 (bit 8)

Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	60	90								

### **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.2C**

Logically:

Event list: Call Disconnected

Device identities

Source device: ME
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	82	81	1C	01	80
	9A	02	E0	90								

### **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3A**

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause: normal call clearing

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	60	90								

## **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.3B**

Logically:

Event list: Call Disconnected

Device identities

Source device: Network
Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7) Ti flag: 0 (bit 8)

Cause: normal call clearing

Coding:

BER-TLV:	D6	0E	19	01	02	82	02	83	81	1C	01	00
	9A	02	E0	90								

## **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4A**

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 1 (bit 8)

Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	80
·	9A	00										

## **EVENT DOWNLOAD - CALL DISCONNECTED 1.1.4B**

Logically:

Event list: Call Disconnected

Device identities

Source device: ME Destination device: SIM

Transaction identifier:

Ti value: 0 (bit 5-7)
Ti flag: 0 (bit 8)
Cause: radio link failure

Coding:

BER-TLV:	D6	0C	19	01	02	82	02	82	81	1C	01	00
·	9A	00										

### 27.22.7.3.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

#### 27.22.7.4 Location Status Event

## 27.22.7.4.1 Location Status Event (normal)

## 27.22.7.4.1.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.4.1.2 Conformance requirement

The ME shall support the EVENT: Location Status event as defined in:

• 3GPP TS 11.14 [15] clause 11.4 and clause 6.4.16.

### 27.22.7.4.1.3 Test purpose

To verify that the ME informs the SIM that an Event: MM\_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD - Location Status) command.

#### 27.22.7.4.1.4 Method of test

#### 27.22.7.4.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

Two cells are defined. Cell 1 has location area code 1 and cell 2 has location area code 2.

MS is in service on Cell 1.

#### 27.22.7.4.1.4.2 Procedure

## **Expected Sequence 1.1(EVENT DOWNLOAD -LOCATION STATUS)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND	
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	
		EVENT LIST 1.1.1	
5	SS	Cell 1 is switched off	
6	$ME \rightarrow SIM$		
_		- Location Status 1.1.1	
7	SS	Cell 2 is switched on 5 seconds	
		after cell 1 was switched off	
8	ME	ME performs cell reselection to cell	
		2	
9		Location Updating Request	
10		Location updating accept	
11	$ME \rightarrow SIM$	ENVELOPE: EVENT DOWNLOAD	[Option A shall apply for GSM parameters]
		- Location Status 1.1.2A	
		or	ro ::
			[Option B shall apply for PCS1900
		- Location Status 1.1.2B	parameters]
			INOTE: The inclusion of the leastier
			[NOTE: The inclusion of the location
			information is optional: (If location status
			indicates normal status)

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Location status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	03										

## TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

#### **EVENT DOWNLOAD - LOCATION STATUS 1.1.1**

Logically:

Event list: Location status

Device identities

Source device: ME
Destination device: SIM
Location status: No service

Coding:

BER-TLV:	D6	0A	19	01	03	82	02	82	81	1B	01	02
DEIX IEV.		0, 1		0.	00	02	02	02	0.		0.	02

## **EVENT DOWNLOAD - LOCATION STATUS 1.1.2A**

Logically:

Event list: Location status

Device identities

Source device: ME
Destination device: SIM

Location status: normal service

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0002) Cell ID Cell Identity Value (0002)

Coding:

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	F1	10	00	02	00	02			

#### **EVENT DOWNLOAD - LOCATION STATUS 1.1.2B**

Logically:

Event list: Location status

Device identities

Source device: ME
Destination device: SIM

Location status: normal service

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0002) Cell ID Cell Identity Value (0002)

BER-TLV:	D6	13	19	01	03	82	02	82	81	1B	01	00
	13	07	00	11	10	00	02	00	02			

## 27.22.7.4.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.5 User Activity Event

## 27.22.7.5.1 User Activity Event (normal)

## 27.22.7.5.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.5.1.2 Conformance Requirement

The ME shall support the EVENT DOWNLOAD -USER ACTIVITY as defined in:

• 3GPP TS 11.14 [15] clause 5.2, clause 6.4.16, clause 6.8, clause 6.6.16, clause 6.11, clause 11, clause 11.5, clause 12.6 and clause 12.25.

#### 27.22.7.5.1.3 Test purpose

To verify that the ME performed correctly the procedure of USER ACTIVITY EVENT.

#### 27.22.7.5.1.4 Method of Test

#### 27.22.7.5.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

#### 27.22.7.5.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD -USER ACTIVITY)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[set up event list: event User Activity]
		PENDING: SET UP EVENT LIST	·
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET	[set up event list: event User Activity]
		UP EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET	[command performed successfully]
		UP EVENT LIST 1.1.1	
5		press any key	
6	$ME \rightarrow SIM$	ENVELOPE EVENT	
		DOWNLOAD -USER ACTIVITY	
		1.1.1	
7	$USER \to ME$	press any key	check if no envelope Event Download-User
			activity sending to the SIM (this event is
			reported once)

PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: SIM
Destination device: ME

Event list User Activity

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99	
	01	04											

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: RFU

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

### **EVENT DOWNLOAD -USER ACTIVITY 1.1.1**

Logically:

Event list User Activity

Device identities

Source device: ME
Destination device: SIM

Coding:

BER-TLV:	D6	07	19	01	04	82	02	82	81

27.22.7.5.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.6 Idle screen available event

27.22.7.6.1 Idle Screen Available (normal)

27.22.7.6.1.1 Definition and applicability

See clause 3.2.2.

27.22.7.6.1.2 Conformance requirement

The ME shall support the EVENT: IDLE SCREEN AVAILABLE event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.1 and clause 12.25.

#### 27.22.7.6.1.3 Test purpose

To verify that the ME informs the SIM the an Event: Idle Screen Available has occurred using the ENVELOPE (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE) command.

27.22.7.6.1.4 Method of test

27.22.7.6.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

#### 27.22.7.6.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)**

Step	Direction	MESSAGE / Action	Comments
1	$USER \to ME$	Select screen other than the ME	
2	$SIM \to ME$	PENDING: SET UP EVENT LIST	[set up event list: idle screen available]
3	$ME \rightarrow SIM$	1.1.1 FETCH	
4	$SIM \to ME$	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[set up event list: idle screen available]
5	$ME \to SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[command performed successfully]
6	$USER \to ME$	Select ME idle screen	
7	$ME \to SIM$	ENVELOPE: IDLE SCREEN AVAILABLE 1.1.1	
8	$USER \to ME$	Select ME idle screen	check if no envelope Event Download- idle screen sending to the SIM ( this event is reported once)

#### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: idle screen available

## Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
·	01	05										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00

#### **EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1**

Logically:

Event list Idle screen available

Device identities

Source device: Display
Destination device: SIM

Coding:

BER-TLV:	D6	07	19	01	05	82	02	02	81

#### 27.22.7.6.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

## 27.22.7.7 Card reader status event

## 27.22.7.7.1 Card Reader Status (normal)

### 27.22.7.7.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.7.1.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

#### 27.22.7.7.1.3 Test purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.7.7.1.4 Method of test

27.22.7.7.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.7.1.4.2 Procedure

## Expected Sequence 1.1 (EVENT DOWNLOAD, Card reader status, Card reader 1, card reader attached, no card inserted)

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND 1.1.1	
		PENDING	
2	$ME \rightarrow SIM$		
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1	[EVENT: Card Reader Status]
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1	[Successfully]
5	$User \to ME$	Insert a card in Reader	
6	$ME \rightarrow SIM$	ENVELOPE: CARD READER STATUS 1.1.1a	
7 8		or ENVELOPE: CARD READER STATUS 1.1.1b Or ENVELOPE: CARD READER STATUS 1.1.1c Or ENVELOPE: CARD READER STATUS 1.1.1d Remove the card from Reader ENVELOPE: CARD READER STATUS 1.1.2a Or ENVELOPE: CARD READER STATUS 1.1.2b Or ENVELOPE: CARD READER STATUS 1.1.2c	

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Card Reader Status

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
'	99	01	06								

## TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TL'	/: 81	03	01	05	00	82	02	82	81	83	01	00	l
---------	-------	----	----	----	----	----	----	----	----	----	----	----	---

#### **ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a**

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	79	
----------	----	----	----	----	----	----	----	----	----	----	----	----	--

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: Yes
Card powered: No

BER-TLV:   D6   0A   99   01   06   82   02   82   81   A0   01   59
--

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: Yes
Card powered: No

Coding:

BER-TLV:	D6	0A	99	Λ1	06	82	02	82	81	A0	01	71
DLIX-ILV.	00	$\cup \cap$	99	Οī	00	02	02	02	01	$\Delta U$	Οī	/ 1

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: Yes
Card powered: No

Coding:

## ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

## Coding:

DED TIVE	DO	0.4	00	04	00	0.0	00	0.0	0.4	A 0	0.4	30
BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	39

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

Coding:

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2c

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: No
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	31	l
	ו טט	1 0/	1 33		1 00	1 02	02	02		1 70		. J.	1

## ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2d

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01 Card reader removable: No Card reader present: Yes Card reader ID-1 size: No Card present in reader: No Card powered: No

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	11
D = 1 \ 1 = \ 1 .		٠, ١	00	<b>.</b>	00	_ <del>_</del>			, o.	,		

## 27.22.7.7.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

## 27.22.7.7.2 Card Reader Status(detachable card reader)

#### 27.22.7.7.2.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.7.2.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 4.9, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.7, clause 12.25, clause 12.33, annex G, annex H, clause 12.25 and clause 12.7.

## 27.22.7.7.2.3 Test purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD - Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen as an example.

#### 27.22.7.7.2.4 Method of test

## 27.22.7.7.2.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.7.2.4.2 Procedure

## Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader not attached, no card inserted)

Step	Direction	Message / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	
		1.1.1PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: SET UP	[SET UP EVENT: Card Reader Status]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Successfully]
		EVENT LIST 1.1.1	
5	User $\rightarrow$ ME	Attach the Card Reader to ME	
6	$ME \rightarrow SIM$	ENVELOPE: CARD READER	
		STATUS 2.1.1a	
		Or	
		ENVELOPE: CARD READER	
		STATUS 2.1.1b	
7		Detach the Card Reader from ME	
8	$ME \rightarrow SIM$	ENVELOPE: CARD READER	
		STATUS 2.1.2a	
		Or	
		ENVELOPE: CARD READER	
		STATUS 2.1.2b	

## ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME
Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: Yes
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

## Coding:

BER-TLV: D6	0A 99	01	06	82	02	82	81	A0	01	39
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## ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01 Card reader removable: Yes Card reader present: Yes Card reader ID-1 size: No Card present in reader: No Card powered: No

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	Α0	01	19	l
----------	----	----	----	----	----	----	----	----	----	----	----	----	---

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2a

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: Yes
Card present in reader: No
Card powered: No

Coding:

#### ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2b

Logically:

Event list

Event 1: Card Reader Status

Device identities

Source device: ME Destination device: SIM

Card reader status

Identity of card reader: 01
Card reader removable: Yes
Card reader present: No
Card reader ID-1 size: No
Card present in reader: No
Card powered: No

Coding:

BER-TLV:	D6	0A	99	01	06	82	02	82	81	A0	01	09
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#### 27.22.7.7.1.5 Test requirement

The behaviour of the test is as defined in 'Expected Sequence 2.1'.

## 27.22.7.8 Language selection event

## 27.22.7.8.1 Language selection event (normal)

## 27.22.7.8.1.1 Definition and applicability

See clause 3.2.2.

#### 27.22.7.8.1.2 Conformance requirement

The ME shall support the EVENT: LANGUAGE SELECTION event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.8 and clause 12.25.

#### 27.22.7.8.1.3 Test purpose

To verify that the ME informs the SIM the an Event: Language selection has occurred using the ENVELOPE (EVENT DOWNLOAD - LANGUAGE SELECTION ) command.

27.22.7.8.1.4 Method of test

27.22.7.8.1.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The current language shall have been set to English. Another language has to be supported, German is an example.

#### 27.22.7.8.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD - LANGUAGE SELECTION)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND	[set up event list: language selection]
		PENDING: SET UP EVENT LIST	
		1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[set up event list: language selection]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
		EVENT LIST 1.1.1	
5	$USER \to ME$	Change the language to German.	
6	$ME \rightarrow SIM$	ENVELOPE: LANGUAGE	
		SELECTION 1.1.1	
7	$USER \to ME$	Change the language to English	
8	$ME \to SIM$	ENVELOPE: LANGUAGE	check if an envelope Event Download-
		SELECTION 1.1.2	language selection is sending again to the
			SIM (this event is continuously reported)

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

## Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: language selection

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82	99
	01	07										

TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

SET UP EVENT LIST Command type:

Command qualifier:

'00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	81	03	01	05	00	82	02	82	81	83	01	00
DLIX ILV.	01	03	01	00	00	02	02	02	01	00	01	00

#### **EVENT DOWNLOAD - LANGUAGE SELECTION 1.1.1**

Logically:

Event list Language selection

Device identities

Source device: ME Destination device: SIM

Language

Language 'de'→64 65 (German)

Coding:

BER-TLV:	D6	0B	19	01	07	82	02	82	81	2D	02	64
	65											

## **EVENT DOWNLOAD - LANGUAGE SELECTION 1.1.2**

Logically:

Event list Language selection

Device identities

Source device: ME Destination device: SIM

Language

'en'→65 6E (English) Language

Coding:

BER-TLV:	D6	0B	19	01	07	82	02	82	81	2D	02	65
_	6E											

#### 27.22.7.8.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

## 27.22.7.9 Browser termination event

## 27.22.7.9.1 Browser termination (normal)

#### 27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME's that support the EVENT: browser termination event driven information.

## 27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in:

• 3GPP TS 11.14 [15] clause 4.7, clause 5.2, clause 6.4.16, clause 6.8, clause 11, clause 11.9, clause 12.25, clause 12.51, annex G and clause 12.7.

### 27.22.7.9.1.3 Test purpose

To verify that the ME informs the SIM of an Event: Browser termination using the ENVELOPE (EVENT DOWNLOAD - Browser Termination) command.

This test applies for MEs which have a browser.

#### 27.22.7.9.1.4 Method of test

#### 27.22.7.9.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

#### 27.22.7.9.1.4.2 Procedure

## **Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)**

Step	Direction	Message / Action	Comments
1	$SIM \to ME$	PROACTIVE COMMAND: SET UP	
		EVENT LIST 1.1.1 PENDING	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[EVENT: Browser termination Status]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[Successfully]
		EVENT LIST 1.1.1	·
5		Launch the browser, go to an	
		URL, then stop the session and	
		the browser.	
6	$ME \rightarrow SIM$	ENVELOPE: BROWSER	
		TERMINATION 1.1.1	

### PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

#### Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Browser termination

## Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	08								

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV:	01	03	01	05	00	92	02	92	Ω1	02	01	00
DEN-ILV.	01	03	UI	05	00	02	02	02	01	ಂತ	UI	00

#### **ENVELOPE: EVENT DOWNLOAD BROWSER TERMINATION 1.1.1**

Logically:

Event list

Event 1: Browser termination

Device identities

Source device: ME
Destination device: SIM

Browser termination cause: User termination

Coding:

		BER-TLV:	D6	0A	99	01	08	82	02	82	81	B4	01	00
--	--	----------	----	----	----	----	----	----	----	----	----	----	----	----

## 27.22.7.9.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

#### 27.22.7.10 Data available event

## 27.22.7.10.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Data available).

## 27.22.7.10.3 Test purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD - Data available) to the SIM after the ME receives a packet of data from the server by the BIP channel previously opened.

#### 27.22.7.10.4 Method of test

#### 27.22.7.10.4.1 Initial conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

## **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

#### SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

### 27.22.7.10.4.2 Procedure

## **Expected sequence 1.1 (EVENT DOWNLOAD - Data available)**

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	See initial conditions
		OPEN CHANNEL 1.1.1A or	
		PROACTIVE COMMAND PENDING:	
		OPEN CHANNEL 1.1.1B	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \rightarrow ME$	PROACTIVE COMMAND: OPEN	[Command performed successfully]
		CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL 1.1.1B	
4	$SS \to ME$	Data sent through the BIP channel	
5	$ME \rightarrow SIM$	ENVELOPE 1.1.1 (Event-Data	
		Available)	

#### ENVELOPE: EVENT DOWNLOAD - Data available 1.1.1

Logically:

Event list

Event: Data available

Device identities

Source device: ME
Destination device: SIM

Channel status

Channel status: Channel 1 open, link established

Channel Data Length

Channel data length: 8 Bytes available in Rx buffer

Coding:

BER-TLV:	D6	0E	99	01	09	82	02	82	81	B8	02	81
	00	B7	01	80								

#### 27.22.7.10.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

### 27.22.7.11 Channel Status event

## 27.22.7.11.1 Definition and applicability

See clause 3.2.2.

## 27.22.7.11.2 Conformance requirements

The ME shall support the class "e" commands as defined in:

• 3GPP TS 11.14 [15].

Additionally the ME shall support ENVELOPE (EVENT DOWNLOAD - Channel Status).

## 27.22.7.11.3 Test purpose

To verify that the ME shall send an  $\,$  ENVELOPE (EVENT DOWNLOAD - Channel Status) to the SIM after the link dropped between the NETWORK and the ME.

#### 27.22.7.11.4 Method of test

#### 27.22.7.11.4.1 Initial conditions

The ME is connected to the SIM Simulator and the System Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

For MEs supporting BIP related to CSD (i.e condition C113 in table B.1), the PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A.

For MEs supporting BIP related to GPRS in UDP (i.e condition C121 in table B.1), The PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B shall be executed to open a channel successfully at the beginning of the test. The corresponding Terminal Response shall be TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B.

The following Bearer Parameters used are those defined in the default Test PDP context3, as specified in TS 51.010-1 [12], for test cases using packet services:

#### **Bearer Parameters**

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

#### **GPRS** Parameters

Network access name: TestGp.rs

User login: UserLog User password: UserPwd

## SIM/ME interface transport level

Transport format: UDP Port number: 44444

Data destination address 01.01.01.01

#### 27.22.7.11.4.2 Procedure

## Expected sequence 1.1 (EVENT DOWNLOAD - Channel Status on a link dropped)

Step	Direction	MESSAGE / Action	Comments
1	$SIM \rightarrow ME$	PROACTIVE COMMAND PENDING:	
		SET UP EVENT LIST 1.1.1	
2	$ME \rightarrow SIM$	FETCH	
3	$SIM \to ME$	PROACTIVE COMMAND: SET UP	[EVENT: channel status]
		EVENT LIST 1.1.1	
4	$ME \rightarrow SIM$	TERMINAL RESPONSE: SET UP	[command performed successfully]
_		EVENT LIST 1.1.1	
5	$SIM \rightarrow ME$		See initial conditions
		OPEN CHANNEL 1.1.1A or	
		PROACTIVE COMMAND PENDING:	
_	NAT 01NA	OPEN CHANNEL 1.1.1B	
6 7	ME → SIM	FETCH	
/	$SIM \to ME$	PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A or PROACTIVE	
		COMMAND: OPEN CHANNEL	
		1.1.1B	
8	ME  o SS	SETUP CALL	
9	SS → ME	CONNECTED	
10	$ME \rightarrow SIM$	TERMINAL RESPONSE: OPEN	[Command performed successfully]
10	IVIL -> SIIVI	CHANNEL 1.1.1A	[Command performed successfully]
		or	
		TERMINAL RESPONSE: OPEN	
		CHANNEL 1.1.1B	
11	$NETWORK \rightarrow ME$	Link dropped	
12	$ME \to SIM$	ENVELOPE 1.1.1 (Event-Channel	
		Status)	

## PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1

Command type: SET UP EVENT LIST

Command qualifier: '00'

Device identities

Source device: SIM
Destination device: ME

Event list

Event 1: Channel Status

Coding:

BER-TLV:	D0	0C	81	03	01	05	00	82	02	81	82
	99	01	0A								

#### TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number:

Command type: SET UP EVENT LIST

Command qualifier: '00

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01	05	00 82	02	82	81	83	01	00	ı
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#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM
Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 1000

Coding:

BER-TLV:	D0	1E	81	03	01	40	01	82	02	81	82	86
•	09	91	11	22	33	44	55	66	77	F8	B5	04
	01	07	00	01	B9	02	03	E8				

#### TERMINAL RESPONSE: OPEN CHANNEL 1.1.1A

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully
Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 1000

		00										
BER-TLV:	1 01	ו חים	1 01	1 10	1 01	രാ	$\alpha$	ເວລ	101	02	1 01	00
IDEK-ILV.	1 0 1	I U.S	1 () [	1 40	1 () (	0/	1 0/	1 0/	ını	റാ	1 () [	1 ()()

B8	02	81	01	B5	04	01	07	00	01	B9	02
03	E8										

#### PROACTIVE COMMAND: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM Destination device: ME

Bearer

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02
Delay Class: 04
Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Text String: UserLog (User login)
Text String: UserPwd (User password)

SIM/ME interface transport level

Transport format: UDP
Port number: 44444
Data destination address 01.01.01.01

#### Coding:

BER-TLV:	D0	36	81	03	01	40	01	82	02	81	82	35
	07	02	02	04	05	05	10	02	39	02	03	E8
	0D	08	F4	55	73	65	72	4C	6F	67	0D	08
	F4	55	73	65	72	50	77	64	3C	03	01	AD
	9C	3E	05	21	01	01	01	01				

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1B

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established or PDP context activated

Bearer description

Bearer type: GPRS

Bearer parameter:

Precedence Class: 02 Delay Class: 04 Reliability Class: 05
Peak throughput class: 05
Mean throughput class: 16
Packet data protocol: 02 (IP)

Buffer

Buffer size: 1000

Coding:

BER-TLV:	81	03	01	40	01	82	02	82	81	83	01	00
	38	02	81	00	35	07	02	02	04	05	05	10
	02	39	02	03	E8							

#### ENVELOPE: EVENT DOWNLOAD - Channel Status 1.1.1

Logically:

Event list

Event: Channel Status

Device identities

Source device: ME
Destination device: SIM

Channel status

Channel status: Channel 1, link dropped

Coding:

BER-TLV:	D6	0B	99	01	09	82	02	82	81	B8	02	01
·	05											

#### 27.22.7.11.1.5 Test requirement

The ME shall operate in the manner defined in expected sequence 1.1.

## 27.22.8 MO SHORT MESSAGE CONTROL BY SIM

## 27.22.8.1 Definition and applicability

See clause 3.2.2.

## 27.22.8.2 Conformance requirement

The ME shall support the MO SEND SHORT MESSAGE CONTROL facility as defined in:

• 3GPP TS 11.14 [15] clause 9.2.

The ME shall also support the SEND SMS facitily as specified in

• 3GPP TS 11.14 [15] clause 6.4.10

## 27.22.8.3 Test purpose

To verify that for all SMS sending attempts, even those resulting from a SEND SHORT MESSAGE proactive SIM command, the ME shall first pass the RP\_destination\_address of the service center and the TP\_Destination\_Address to the SIM, using the ENVELOPE (MO Short Message CONTROL).

To verify that if the SIM responds with '90 00', the ME shall send the SMS with the address unchanged.

To verify that if the SIM responds with '93 00', the ME shall not send the SMS and may retry the command.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the SM as proposed, not send the SM, send the SM using the data supplied by the SIM.

To verify that, in the case where the initial SM request results from a proactive SEND SHORT MESSAGE, if the MO SMS CONTROL result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

#### 27.22.8.4 Method of tests

#### 27.22.8.4.1 Initial conditions

The ME is connected to the System Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The MO SMS control service is enabled.

The SMS service center address in the ME shall be set to "+112233445566778" prior to the execution of the tests.

The GSM parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 01;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001;

The PCS 1900 parameters of the system simulator are:

- Mobile Country Code (MCC) = 001;
- Mobile Network Code (MNC) = 011;
- Location Area Code (LAC) = 0001;
- Cell Identity value = 0001.

#### 27.22.8.4.2 Procedure

## Expected Sequence 1.1 (MO SM CONTROL BY SIM , with Proactive command, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND	
		SHORT MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT	
		MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL	[Option A shall apply for GSM parameters]
		1.1.1A	
		Or	
		ENVELOPE: MO SHORT MESSAGE CONTROL	[Option B shall apply for PCS1900
		1.1.1B	parameters]
6	SIM -> ME	9F 02	
7	ME -> SIM	GET RESPONSE	
8	SIM -> ME	MO SMS CONTROL RESULT 1.1.1	[ "Allowed, no modification"]
9	ME -> SS	Send SMS-PP Message 1.1	[The ME sends the SM containing SMS-PP
			(SEND SHORT MESSAGE) Message 1.1
			without modification]
10	SS -> ME	SMS RP-ACK	
11	ME -> SIM	TERMINAL RESPONSE: SEND SHORT	
		MESSAGE 1.1.1	

#### PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1

#### Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Send SM"

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding:

BER-TLV:	D0	37	81	03	01	13	00	82	02	81	83	85
	07	53	65	6E	64	20	53	4D	86	09	91	11
	22	33	44	55	66	77	F8	8B	18	01	00	09
	91	10	32	54	76	F8	40	F4	0C	54	65	73
	74	20	4D	65	73	73	61	67	65			

#### SMS-PP (SEND SHORT MESSAGE) Message 1.1

Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data
Message class class 0
TP-UDL 12

TP-UD "Test Message"

Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F8	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

## **ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1A**

Logically:

Device identities

Source device: ME Destination device: SIM

RP Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "112233445566778"

TP Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012345678"

**Location Information** 

MCC & MNC the mobile country and network code (00F110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

#### Coding:

BER-TLV:	D5	20	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	07	00	F1	10	00	01	00
	01										

## ENVELOPE MO SHORT MESSAGE CONTROL 1.1.1B

Logically:

Device identities

Source device: ME Destination device: SIM

**RP** Destination Address

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "112233445566778"

**TP Destination Address** 

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string "012345678"

**Location Information** 

MCC & MNC the mobile country and network code (001110)

LAC the location Area Code (0001)
Cell ID Cell Identity Value (0001)

Coding:

BER-TLV:	D5	20	02	02	82	81	06	09	91	11	22
	33	44	55	66	77	F8	06	06	91	10	32
	54	76	F8	13	07	00	11	10	00	01	00
	01										

#### MO SHORT MESSAGE CONTROL RESULT 1.1.1

Logically:

MO Short Message control result : '00' = Allowed, no modification

Coding:

BER-TLV: 00 00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE packing not required

Device identities

Source device: ME Destination device: SIM

Result

General Result: Command performed successfully

1	0.4	0	4	4	0	S	2	S	0.4	S	4	
BER-TLV:		03	01	1:3	00	l 82	02	l 82	I 81		01	00
	0 1	00	0 1	10	00	02	02	02	01	00	0 1	

## Expected Sequence 1.2 (MO SM CONTROL BY SIM, with user SMS, Allowed, no modification')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.1.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SHORT MESSAGE CONTROL RESULT 1.1.1	[ "Allowed, no modification"]
6	ME -> SS	Send SMS-PP Message 1.1	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
7	SS -> ME	SMS RP-ACK	

## Expected Sequence 1.3 (MO SM CONTROL BY SIM, with Proactive command, Not allowed')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT	
		MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters]
			[Option B shall apply for PCS1900 parameters]
6	SIM -> ME	9F 02	
7	ME -> SIM	GET RESPONSE	
8	SIM -> ME	MO SHORT MESSAGE CONTROL RESULT 1.3.1	[ "not Allowed"]
9	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1	[ Permanent Problem - Interaction with Call Control or MO short message control by SIM ]
10	ME→ SS	The ME does not send the Short Message	

MO SHORT MESSAGE CONTROL RESULT 1.3.1

Logically:

MO Short Message control result : '01' = Not Allowed

Coding:

BER-TLV: 01 00

TERMINAL RESPONSE: SEND SHORT MESSAGE 1.3.1

Logically:

Command details

Command number: 01

Command Type: SEND SHORT MESSAGE

SMS Packing Required: Yes

Device identities

Source device: ME Destination device: SIM

Result

General Result: Interaction with call control or MO-SM by SIM permanent

problem

Additional information: Action not allowed

Coding:

BER-TLV:	81	03	01	13	01	82	02	82	81	83	02	39
	01											

## Expected Sequence 1.4 (MO SM CONTROL BY SIM, with user SMS, Not allowed')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.1.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F 02	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SM CONTROL RESULT 1.3.1	[ "Not allowed"]
6	ME → SS	The ME does not send the Short Message	

## Expected Sequence 1.5 (MO SM CONTROL BY SIM , with Proactive command, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or	[Option A shall apply for GSM parameters]
		ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option B shall apply for PCS1900 parameters]
6	SIM -> ME	9F 15	
7	ME -> SIM	GET RESPONSE	
8	SIM -> ME	MO SM CONTROL RESULT 1.5.1	["Allowed with modifications"]
9	ME -> SS	Send SMS-PP Message 1.5	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.5 with the data provided by the SIM to the changed Service Center Adress "+112233445566779"]
10	SS -> ME	SMS RP-ACK	
11	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1	

## MO SHORT MESSAGE CONTROL RESULT 1.5.1

Logically:

MO Short Message control result : '02' = Allowed with modifications

RP Destination\_Address of the Service Center

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: "112233445566779"

**TP Destination Address** 

TON: International

NPI: "ISDN / telephone numbering plan" or "unknown"

Dialling number string: "012345679"

BER-TLV:	02	13	86	09	91	11	22	33	44	55	66
	77	F9	86	06	91	10	32	54	76	F9	

## SMS-PP (SEND SHORT MESSAGE) Message 1.5

#### Logically:

**SMS TPDU** 

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345679"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data Message class class 0 TP-UDL 12

TP-UD "Test Message"

#### Coding:

BER-TLV:	01	00	09	91	10	32	54	76	F9	40	F4	0C
	54	65	73	74	20	4D	65	73	73	61	67	65

#### TERMINAL RESPONSE: SEND SHORT MESSAGE 1.5.1

Logically:

Command details

Command number: 01

Command Type: SEND SHORT MESSAGE

SMS Packing Required: Yes

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed, but modified by call control by SIM

BER-TLV:	81	03	01	13	01	82	02	82	81	83	01	05	

## Expected Sequence 1.6 (MO SM CONTROL BY SIM, with user SMS, Allowed with modifications')

Step	Direction	Message / Action	Comments
1	USER -> ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.1.
2	ME -> SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters] [Option B shall apply for PCS1900 parameters]
3	SIM -> ME	9F XX	
4	ME -> SIM	GET RESPONSE	
5	SIM -> ME	MO SM CONTROL RESULT 1.5.1	[ "Allowed with modifications"]
6	ME-> SS	Send SMS-PP Message 1.5	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1. 5 with the data provided by the SIM] to the changed Service Center Adress "+112233445566779"
7	SS -> ME	SMS RP-ACK	

## Expected Sequence 1.7 (MO SM CONTROL BY SIM , with Proactive command, the SIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	SIM -> ME	PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1	
2	ME -> SIM	FETCH	
3	SIM -> ME	PROACTIVE COMMAND: SEND SHORT MESSAGE 1.1.1	Send SMS to "+012345678"
4	ME -> USER	Display "Send SM"	[Alpha Identifier]
5	ME -> SIM	ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters]  [Option B shall apply for PCS1900 parameters]
6	SIM -> ME	90 00	
7	ME ->SS	Send SMS-PP	[The ME sends the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1 without modification]
8	SS -> ME	SMS RP-ACK	
9	ME -> SIM	TERMINAL RESPONSE: SEND SHORT MESSAGE 1.1.1	

## Expected Sequence 1.8 (MO SM CONTROL BY SIM , Send Short Message attempt by user, the SIM responds with '90 00', Allowed, no modification)

Step	Direction	Message / Action	Comments
1	$User \to ME$	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as
			defined in SMS-PP (SEND SHORT
			MESSAGE) Message 1.1.
2	$ME \rightarrow SIM$	ENVELOPE : MO SHORT MESSAGE CONTROL 1.1.1 A	[Option A shall apply for GSM parameters]
		or	
		ENVELOPE : MO SHORT MESSAGE CONTROL	[Option B shall apply for PCS1900
		1.1.1B	parameters]

3	$SIM \rightarrow ME$	90 00	
4	ME → SS		[The ME sends the SM containing SMS- PP (SEND SHORT MESSAGE) Message 1.1 without modification]
5	SS -> ME	SMS RP-ACK	•

# Expected Sequence 1.9 (MO SM CONTROL BY SIM , Send Short Message attempt by user, the SIM responds with '93 00')

Step	Direction	Message / Action	Comments
1	User → ME	The user makes a SMS with the user data "Test Message" and sends it to +012345678.	[The data entered and the ME settings shall lead to the same SMS-TPDU as defined in SMS-PP (SEND SHORT MESSAGE) Message 1.1.
2	ME → SIM	ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1A or ENVELOPE: MO SHORT MESSAGE CONTROL 1.1.1B	[Option A shall apply for GSM parameters]  [Option B shall apply for PCS1900 parameters]
3	$SIM \rightarrow ME$	93 00	
4	ME  o SS	No action allowed	[The ME shall not send the SM containing SMS-PP (SEND SHORT MESSAGE) Message 1.1or any other SM to the SS]

## 27.22.8.5 Test requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.9.

Annex A: Void

Annex B: Void

Annex C: Void

## Annex D (normative): Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

#### ANSWER TO RESET

### Logically:

TS (Initial character): '3B'

T0 (Format character): '86' (Following interface characters: TD(1), number of historical characters: 6)

TD1: '00' (Following interface characters: none, Transfer protocol: T=0)

T1: 91

T2: 99
T3: 00
T4: 12
T5: C1
T6: 00

#### Coding:

BER-TLV:	3B	86	00	91	99	00	12	C1	00

- 1. For a successful outcome of the command "Select MasterFile" the TestSIM shall send SW1/SW2 "9F 1B".
- 2. For a successful outcome of the command "Get Response with Length 1B" on the MasterFile the TestSIM shall respond:

RFU: '00 00'
Not allocated memory: '653 bytes'
File ID: Master File

Type of file: MF

RFU: 00 00 22 FF 01'

Length of following data: 14 bytes'

File characteristics:

Clock Stop: Not allowed Min. frequence for GSM algorithm: 13/8 MHz

Technology identification: 3V Technology SIM

CHV1: disabled

DFs in current directory: 2
EFs in current directory: 8
Number of CHV and admin. Codes: 3
RFU byte 18: 00

CHV1 status:

False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV1 status:

False representations remaining: 10 RFU-bits 7-5: 000 Secret code: Initialized

CHV2 status:

False representations remaining: 3
RFU-bits 7-5: 000
Secret code: Initialized

Unlock CHV2 status:

False representations remaining: 10

RFU-bits 7-5: 000
Secret code: Initialized
RFU bytes 23: 00

Reserved for admin. management: 00 83 00 FF

Status Words

SW1 / SW2: Normal ending of command

#### Coding:

BER-TLV:	00	00	02	8D	3F	00	01	00	00	22	FF	01
	0E	9B	02	08	03	00	83	8A	83	8A	00	00
	83	00	FF	90	00							

1. For a successful outcome of the command "Select GSM" the TestSIM shall send SW1/SW2 "9F 1B".

2. For a successful outcome of the command "Select PLMN" the TestSIM shall send SW1/SW2 "9F 0F".

3. EF<sub>PLMN</sub> Information:

RFU-Bytes 1-2: 00 00 File size: 102 bytes File ID: 6F30

Type of File: Elementary file

Byte 8

RFU: 00

Access Condition:

UPDATE: CHV1
READ/SEEK: CHV1
RFU-bits 4-1: 1111
INCREASE: NEVER
INVALIDATE: NEVER
REHABILITATE: NEVER

File Status:

Invalidation status: File not invalidated

Readable/updateable: Not readable/updatable when invalidated

RFU-bits 8-4, 2: 0000 0 Length of following data: 2 bytes Structure: Transparent

Length of record: 00

The initial coding of the  $EF_{PLMN}$  shall be FF FF ... FF (logically: Empty).

## Annex E (normative): Details of terminal profile support

Table E.1: TERMINAL PROFILE support

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
1	Profile Download	3GPP TS 11.14, 5	R96	М		PD_Pro_Dvnl
2	SMS-PP data download	3GPP TS 11.14, 5	R96	C201		PD_SMS_PP
3	Cell Broadcast data download	3GPP TS 11.14, 5	R96	C202		PD_CB
4	Menu selection	3GPP TS 11.14, 5	R96	М		PD_Menu_sel
5	'9EXX' response code for SIM data download error	3GPP TS 11.14, 5	R97	М		PD_9EXX
6	Timer expiration	3GPP TS 11.14, 5	R98	М		PD_TExpir
7	USSD string data object supported in Call Control	3GPP TS 11.14, 5	R98	М		PD_CC_USSD_Str
8	Envelope Call Control always sent to the SIM during automatic redial mode	3GPP TS 11.14, 5	R99	M		PD_CC_Auto_Redial
9	Command result	3GPP TS 11.14, 5	R96	М		PD_Cmd_Res
10	Call Control by SIM	3GPP TS 11.14, 5	R96	М		PD_CC
11	Cell identity included in Call Control by SIM	3GPP TS 11.14, 5	R97	М		PD_CC_Cell_Id
12	MO short message control by SIM	3GPP TS 11.14, 5	R98	М		PD_MO_SMS_CC
13	Handling of the alpha identifier	3GPP TS 11.14, 5	R97	М		PD_Alpha _ld
14	UCS2 Entry supported	3GPP TS 11.14, 5	R97	C203		PD_UCS2_entry
15	UCS2 Display supported	3GPP TS 11.14, 5	R97	C203		PD_UCS2_Display
16	Display of the extension text	3GPP TS 11.14, 5	R98	C205		PD_Disp_Ext_Text
17	DISPLAY TEXT	3GPP TS 11.14, 5	R96	М		PD_Display_Text
18	GET INKEY	3GPP TS 11.14, 5	R96	М		PD_Get_Inkey
19	GET INPUT	3GPP TS 11.14, 5	R96	М		PD_Get_Input
20	MORE TIME	3GPP TS 11.14, 5	R96	М		PD_More_Time
21	PLAY TONE	3GPP TS 11.14, 5	R96	М		PD_Play_Tone
22	POLL INTERVAL	3GPP TS 11.14, 5	R96	М		PD_Poll_interval
23	POLLING OFF	3GPP TS 11.14, 5	R96	М		PD_Polling_Off
24	REFRESH	3GPP TS 11.14, 5	R96	М		PD_Refresh
25	SELECT ITEM	3GPP TS 11.14, 5	R96	М		PD_Select_Item
26	SEND SHORT MESSAGE	3GPP TS 11.14, 5	R96	М		PD_Send_SMS
27	SEND SS	3GPP TS 11.14, 5	R96	М		PD_Send_SS
28	SEND USSD	3GPP TS 11.14, 5	R98	М		PD_Send_USSD
29	SET UP CALL	3GPP TS 11.14, 5	R96	М		PD_SetUp_Call
30	SET UP MENU	3GPP TS 11.14, 5	R96	М		PD_SetUp_Menu
31	PROVIDE LOCAL INFORMATION (LOCI & IMEI)	3GPP TS 11.14, 5	R96	М		PD_Provide_Local

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
	PROVIDE LOCAL	3GPP TS 11.14, 5	R97	M	- саррон	PD_Provide_Local_
	INFORMATION (NMR)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				NMR
	SET UP EVENT LIST	3GPP TS 11.14, 5	R98	М		PD_Setup_Evt_List
	Event: MT call	3GPP TS 11.14, 5	R98	М		PD_MT_Call
	Event: Call connected	3GPP TS 11.14, 5	R98	М		PD_Call_Conn
	Event: Call disconnected	3GPP TS 11.14, 5	R98	М		PD_Call_Disc
	Event: Location status	3GPP TS 11.14, 5	R98	М		PD_Loc_Status
	Event: User activity	3GPP TS 11.14, 5	R98	М		PD_User_Act
		3GPP TS 11.14, 5	R98	М		PD_ldle_Scr_Avail
	Event: Card reader status	3GPP TS 11.14, 5	R98	C206		PD Evt Rdr Status
	Event: Language selection	3GPP TS 11.14, 5	R99	М		PD_Lang_Select
	Event: Browser Termination	3GPP TS 11.14, 5	R99	C212		PD_Browser_Term
	Event: Data available	3GPP TS 11.14, 5	R99	C223		PD_Data_Avail
	Event: Channel status	3GPP TS 11.14, 5	R99	C223		PD_Evt_Ch_Status
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_45
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_46
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_47
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_48
	POWER ON CARD	3GPP TS 11.14, 5	R98	C206		PD_C_On
	POWER OFF CARD	3GPP TS 11.14, 5	R98	C206		PD_C_Off
	PERFORM CARD APDU	3GPP TS 11.14, 5	R98	C206		PD_C_APDU
	GET READER STATUS	3GPP TS 11.14, 5	R98	C206		PD_Get_Rdr_Status
	(Card reader status)					_ =
53	GET READER STATUS	3GPP TS 11.14, 5	R99	C208		PD_Get_Rdr_Id
	(Card reader identifier)	, , ,				
54	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_54
55	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_55
56	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_56
57	TIMER MANAGEMENT	3GPP TS 11.14, 5	R98	М		PD_Timer_Mgt_Start
	(start, stop)	·				_Stop
58	TIMER MANAGEMENT	3GPP TS 11.14, 5	R98	М		PD_Timer_Val
	(get current value)					
	PROVIDE LOCAL	3GPP TS 11.14, 5	R98	М		PD_Provide_Local_
	INFORMATION (date, time					D_Time
	and time zone)					
	Binary choice in GET	3GPP TS 11.14, 5	R98	М		PD_Bin_Get_Inkey
	INKEY	00DD T0 44 44 5	Doo			DD O: II M I T
61	SET UP IDLE MODE TEXT	3GPP 1S 11.14, 5	R98	М		PD_Stup_Id_Mod_T
-00	DUNIAT COMMAND "	20DD T0 44 44 5	Doc	0000		xt
	RUN AT COMMAND (i.e.	3GPP TS 11.14, 5	R98	C209		PD_Run_AT
	class "b" is supported) 2nd alpha identifier in SET	3GPP TS 11.14, 5	DOG	N A		DD Cottle Coll Con
		JOSEP 15 11.14, 5	R98	М		PD_SetUp_Call_Sec
	UP CALL  2nd capability configuration	3GPP TS 11.14, 5	R98	C210		_Alpha_Id PD_Cap_Conf_Para
	parameter	3GFF 13 11.14, 5	K90	0210		· ·
65	Sustained DISPLAY TEXT	3GPP TS 11.14, 5	R98	C211		m PD_Sustained_Displ
00	Custamed Dist LAT TEXT	0011 10 11.14, 5	1130	0211		Txt
66	SEND DTMF command	3GPP TS 11.14, 5	R98	М		PD_Send_DTMF
	PROVIDE LOCAL	3GPP TS 11.14, 5	R98	M		PD_Provide_Local_B
",	INFORMATION - BCCH		1100	141		CCH_List
68	PROVIDE LOCAL	3GPP TS 11.14, 5	R99	М		PD_Provide_Local_L
	INFORMATION (language)					S
	PROVIDE LOCAL	3GPP TS 11.14, 5	R99	М		PD_Provide_Local_T
	INFORMATION (Timing	, -				A
	Advance)		<u> </u>			
70	LANGUÁGE	3GPP TS 11.14, 5	R99	М		PD_Lang_Notif
	NOTIFICATION					
71	LAUNCH BROWSER	3GPP TS 11.14, 5	R99	C212		PD_Launch_Brws
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_72
73	Soft keys support for	3GPP TS 11.14, 5	R99	C213		PD_Softkey_Select_I
	SELECT ITEM					tem
	Soft Keys support for SET	3GPP TS 11.14, 5	R99	C213		PD_Softkey_SetUp
	UP MENU					_Menu
75	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_75

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
76	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_76
77	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_77
78	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_78
79	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_79
80	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_80
81	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
82	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
83	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
84	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
85	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
86	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
87	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C214		PD_Max_SoftKey
88	Maximum number of soft keys available ('FF' = RFU)	3GPP TS 11.14, 5	R99	C124		PD_Max_SoftKey
89	OPEN CHANNEL	3GPP TS 11.14, 5	R99	C223		PD_Open_Ch
90	CLOSE CHANNEL	3GPP TS 11.14, 5	R99	C223		PD_Close_Ch
91	RECEIVE DATA	3GPP TS 11.14, 5	R99	C223		PD_Rx_Data
92	SEND DATA	3GPP TS 11.14, 5	R99	C223		PD_Send_Data
93	GET CHANNEL STATUS	3GPP TS 11.14, 5	R99	C223		PD_Get_Ch_Status
94	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_94
95	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_95
96	RFU	3GPP TS 11.14, 5	R96	Χ		PD_RFU_96
97	CSD supported by ME	3GPP TS 11.14, 5	R99	C207		PD_CSD
98	GPRS supported by ME	3GPP TS 11.14, 5	R99	C222		PD_GPRS
99	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_99
100	RFU	3GPP TS 11.14, 5	R96	Χ		PD_RFU_100
101	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_101
102	Number of channels supported by ME	3GPP TS 11.14, 5	R99	C223		PD_Nb_Channel

Item	Terminal Profile	Ref.	Release	Status	Support	Mnemonic
	Number of channels	3GPP TS 11.14, 5	Release R99	C223	Support	PD_Nb_Channel
	supported by ME	,				
	Number of channels supported by ME	3GPP TS 11.14, 5	R99	C223		PD_Nb_Channel
105	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
106	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
107	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
108	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
109	Number of characters supported down the ME	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char
110	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_110
111	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_111
	Screen Sizing Parameters	3GPP TS 11.14, 5	R99	C216		PD_Screen_Siz
	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
114	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
115	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
116	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
117	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
118	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
119	Number of characters supported across the ME display	3GPP TS 11.14, 5	R99	C217		PD_Nb_Char_Disp
120	Variable size fonts Supported	3GPP TS 11.14, 5	R99	C217		PD_Var_Font
121	Display can be resized	3GPP TS 11.14, 5	R99	C218		PD_Disp_Resiz
122	Text Wrapping supported	3GPP TS 11.14, 5	R99	C218		PD_Txt_Wrap
123	Text Scrolling supported	3GPP TS 11.14, 5	R99	C218		PD_Txt_Scroll
124	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_124
125	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_125
126	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
127	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
128	Width reduction when in a menu	3GPP TS 11.14, 5	R99	C217		PD_Width_Reduc
129	TCP	3GPP TS 11.14, 5	R99	C220		PD_TCP
130	UDP	3GPP TS 11.14, 5	R99	C221		PD_UDP
131	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_131
	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_132
133	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_133
134	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_134
	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_135
	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_136
137	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_137
138	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_138
	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_139
140	RFU	3GPP TS 11.14, 5	R96	X		PD_RFU_140
140						_ ~

142		Ref.	Release	Status	Support	Mnemonic		
142	RFU	3GPP TS 11.14, 5	R96	Χ		PD_RFU_142		
143	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_143		
144	RFU	3GPP TS 11.14, 5	R96	Χ		PD_RFU_144		
145	Protocol Version	3GPP TS 11.14, 5	R99	TBD				
146	Protocol Version	3GPP TS 11.14, 5	R99	TBD				
147	Protocol Version	3GPP TS 11.14, 5	R99	TBD				
148	Protocol Version	3GPP TS 11.14, 5	R99	TBD				
149	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_149		
150	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_150		
151	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_151		
152	RFU	3GPP TS 11.14, 5	R96	Х		PD_RFU_152		
C201	IF E.1/3 THEN O E	LSE M		PE	CB			
C202	IF E.1/2 THEN O E	LSE M		PD	SMS_PP			
C203	IF A.1/3 THEN M			O_	O_Ucs2_Entry			
C204	IF A.1/15 THEN M		O_	O_Ucs2_Disp				
C205	IF A.1/4 THEN M			_	O_Ext_Str			
C206	IF A.1/7 THEN M				O_Dual_Slot			
C207	IF A.1/12 THEN M			_	O_BIP_CSD			
C208	IF (A.1/7 AND A.1/	8) THEN M		_	O_Dual_Slot AND O_Detach_Rdi			
C209	IF A.1/9 THEN M			O_Run_At				
C210	IF A.1/1 THEN M			O_Cap_Conf				
C211	IF A.1/2 THEN M			O_sust_text				
C212	IF A.1/10 THEN M			O_LB O_Softkey				
C213 C214	IF A.1/11 THEN M	values "0" / "1" allowe	- d	_	_ ,	aromotoro)		
C214	Void	values 0 / 1 allowe	eu	U_ Va	_Softkey (pa	arameters)		
C216	IF A.1/13 THEN M				Scr Siz			
C217	IF C217 THEN bit v	2d		_Scr_Siz (pa	arameters)			
C218	IF A.1/14 THEN M	raidos o / i dilove	<b>J</b>		Scr_Resiz	ararriotoroj		
C219	IF C218 THEN bit v	ed			(parameters)			
C220	IF A.1/18 THEN M			TCP	\(\frac{1}{2} = \frac{1}{2} =			
C221	IF A.1/17 THEN M				UDP			
C222	IF A.1/21 THEN M			_	BIP_GPRS	3		
C223	IF (C207 OR C222	) THEN M		O				

Comments:
This static requirement for the TERMINAL PROFILE is specifying the bit coding of this command. In the support column a "Yes" (or "Y" or "y") means bit coding "1" and a "No" (or "N" or "n") and "X" means bit coding "0" in the command.

# Annex F (informative): Change history

CR	REV	PHASE	VERS	SUBJECT	CAT	NEW_VERS
-		96	-	Approved as release 1996 at SMG#30	-	5.0.0
A001		96	5.0.0	Corrections to SIM Application Toolkit Test Specification	F	5.1.0
			5.1.0	Version update to 5.1.1 for Publication		5.1.1
A002		96	5.1.0	Editorial and coding corrections	F	5.2.0
A003		96	5.2.0	Correction of wrong coding for SIM Application Toolkit test 27.22.4.2	F	5.3.0
A004		96	5.2.0	Corrections for Test Case 27.22.5.1 (SMS-PP Data Download)	F	5.3.0
A005		96	5.3.0	Correction of wrong coding for SIM Application Toolkit 27.22	F	5.4.0
A006		96	5.4.0	Corrections for Test Case 27.22.4.7 (REFRESH)	F	5.5.0
A007		96	5.4.0	Corrections for Test Case 27.22.5.2 (SMS-CB Data Download)	F	5.5.0
A008		99	5.5.0	Upgrade of the MS SAT test specification to Release 99	F	8.1.0
A010r1		99	8.1.0	Addition of Terminal Profile information, suppression of PLAY TONE	F	8.2.0
A011			0.2.0	Test sequence 1.2 References to 11.10-1 replaced. Reference to 11.10-2 removed.	F	8.3.0
A011		99 R99	8.2.0 8.3.0	Corrections to Send Short Message, Sequence 1.4	F	8.4.0
A012		R99	8.3.0	Redial in Set Up Call	F	8.4.0
A014		R99	8.3.0	Correction to Terminal Response: Set Up Call 1.7.1	F	8.4.0
A015		R99	8.3.0	Select Item: Support of "No response from user"	F	8.4.0
A016		R99	8.3.0	Correction of Emergency Call test cases	F	8.4.0
A017		1100	0.0.0	Essential corrections to default values for SIM Application Toolkit	•	0.4.0
7.017			1	testing		
A018	-	R99	8.4.0	Clarification on comprehension required flag usage	F	8.5.0
A019				Essential corrections to Display text test cases		
A020				Essential corrections to Get Inkey test cases		
A021	-	R99	8.4.0	Essential corrections to Get Input test cases	F	8.5.0
A022				Essential corrections to Set Up Menu test cases		
A023				Essential corrections to Play Tone test cases		
A024				Essential corrections to Poll Intervall test case		
A025	-	R99	8.4.0	Essential corrections to Polling off test case	F	8.5.0
A026	-	R99	8.4.0	Essential corrections to Provide Local Information test cases	F	8.5.0
A027	-	R99	8.4.0	Essential corrections to Send Short message test cases	F	8.5.0
A028	-	R99	8.4.0	Essential corrections to Language Notification test cases	F	8.5.0
A029				Essential corrections to Send SS test cases		
A030	-	R99	8.4.0	Essential corrections to Set Up Call test cases	F	8.5.0
A031		Doo	0.40	Essential corrections to Send USSD test cases	_	0.5.0
A032	-	R99	8.4.0	Essential correction to Set Up Idle Mode Text test cases	F	8.5.0
A033 A034				Essential corrections to Power Off Card test case		
A034 A035				Essential corrections to Perform Card APDU test cases Essential correction to Get Reader Status test cases		
A036				Essential corrections to Send DTMF test cases		<del> </del>
A030	-	R99	8.4.0	Essential corrections to CALL CONTROL BY SIM test cases	F	8.5.0
A038	-	R99	8.4.0	Essential corrections to CALL CONTROL BY SIM (Interaction with	F	8.5.0
7.000		1100	0.4.0	FDN/ BDN) test cases	•	0.0.0
A039				Essential corrections to Select Item test cases		
A040				Essential corrections to card reader status event download test		
			1	cases		
A041	ı	R99	8.4.0	Essential corrections to language selection and browser termination	F	8.5.0
				event download test cases		
A042	-	R99	8.4.0	Essential corrections to Close Channel test cases	F	8.5.0
A043	-	R99	8.4.0	Essential corrections to Launch Browser test cases	F	8.5.0
A044				Essential corrections to Open Channel test cases		
A045				Essential corrections to Receive Data test cases		
A046				Essential corrections to Send Data test cases		_
A047			<del></del>	Essential corrections to channel status event download test case		<del> </del>
A048 A049				Essential corrections to Get Channel Status test cases		+
A049 A050		R99	8.4.0	Essential corrections to CB data download test cases  Essential corrections to location status, user activity and idle screen	F	8.5.0
A030	-	Kaa	0.4.0	available event download test cases	Г	0.5.0
A051	-	R99	8.4.0	Corrections in the REFRESH test sequences (with inclusion of T3-	F	8.5.0
. 1001			00	030535's contents)		3.3.3
A052	-	R99	8.4.0	Essential corrections to test requirement references	F	8.5.0
A053				Essential corrections to CALL CONTROL BY SIM (supplementary		
			1	services) test case		
A054	-	R99	8.4.0	Essential corrections to MT Call, Call connected and Call	F	8.5.0
				disconnected event download test cases		
A055	-	R99	8.5.0	Introduction of "MO Short Message Control by SIM" envelope	В	8.6.0
			<u> </u>	testing		<del> </del>
A056	-	R99	8.5.0	Re-Introduction of changes already approved at the last T3.	F	8.6.0
A057	-	R99	8.5.0	Essential corrections	F	8.6.0
A058	-	R99	8.5.0	Essential corrections to 27.22.4.14 "POLLING OFF"	F	8.6.0
A059	-	R99	8.5.0	Essential corrections to Send DTMF test cases	F	8.6.0
A060	-	R99	8.5.0	Introduction of BIP testing in GPRS	F	8.6.0
A061		R99	8.6.0	Correction of image instance descriptor for colour icons	F	8.7.0
A062		R99	8.6.0	Essential correction on Terminal Profile for the BIP	F	8.7.0

				Inclusion of tests on Open Channel for GPRS, on the user		
				confirmation		
A063		R99	8.6.0	CR 11.10-4 Launch Browser test cases	F	8.7.0
A064		R99	8.6.0	CR 11.10-4 R99: Essential corrections	F	8.7.0
A065		R99	8.6.0	CR 11.10-4 R99: Essential correction of coding convention	F	8.7.0
A071		R99	8.7.0	Correction of Cell Broadcast message download test	F	8.8.0
A066		R99	8.7.0	Essential corrections	F	8.8.0
A067		R99	8.7.0	Support of GSM 700, GSM 850 and PCS 1900	F	8.8.0
A068		R99	8.7.0	Corrections of applicability table	F	8.8.0
A070		R99	8.7.0	Correction on allowing optional parameters in ENVELOPE(CALL	F	8.8.0
				CONTROL) command for call set-ups when testing Call Control		
				procedures		
A069		R99	8.7.0	Essential corrections to Call Control test cases	F	8.8.0
A076	-	R99	8.8.0	Essential corrections of Event Download test cases	F	8.9.0
A073	-	R99	8.8.0	Essential corrections	F	8.9.0
A072	-	R99	8.8.0	Clarification of call hang up in 27.22.4.5 Play Tone	F	8.9.0
A074	-	R99	8.8.0	Removal of misleading comment from Refresh SIM Reset tests	F	8.9.0
A075	-	R99	8.8.0	Correction of poll interval related tests	F	8.9.0
A077	-	R99	8.9.0	Correction of Send Short Message test case	F	8.10.0
A078	-	R99	8.9.0	Correction of Select Item test case	F	8.10.0
A079	-	R99	8.9.0	Correction of Language Notification test case	F	8.10.0
A080	-	R99	8.9.0	Correction of Select Item (Next action identifier) test case	F	8.10.0
A081	-	R99	8.9.0	Correction of PROFILE DOWNLOAD test case – incorrect P2	F	8.10.0
A082	-	R99	8.9.0	Correction of CALL CONTROL test cases	F	8.10.0
A083	-	R99	8.9.0	Incorrect specification of file codings	F	8.10.0
A084	-	R99	8.9.0	Correction of Refresh test case	F	8.10.0
A085	-	R99	8.9.0	Correction of MO SM CONTROL BY SIM test case	F	8.10.0
A086	-	R99	8.9.0	Correction of Errors	F	8.10.0
A087	-	R99	8.9.0	Clarification of PLAY TONE test case	F	8.10.0
A088	-	R99	8.9.0	Clarification of RECEIVE DATA test case	F	8.10.0
A089	-	R99	8.9.0	Corrections for Test Case 27.22.5.1 (SMS-PP Data Download)	F	8.10.0
A090	-	R99	8.9.0	Modification of 27.22.1 PROFILE DOWNLOAD	F	8.10.0
A091	-	R99	8.9.0	Correction of Set Up Idle Mode Text test case	F	8.10.0
A092	-	R99	8.9.0	Correction of Timer Management test cases	F	8.10.0
A093	-	R99	8.9.0	Essential Corrections on Launch Browser	F	8.10.0

## History

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